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An annotated list of the Georgian harvestmen (Arachnida, Opiliones)

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Abstract

An annotated list of the Georgian harvestmen was prepared based on literature and unpublished collection data, in which 48 species belonging to 19 genera within six families are included. Twenty-seven species are endemic to the Caucasus Ecoregion, while 10 species are endemic to Georgia. Five species are highly specialized cavernicolous ones and are only known from caves. Former subspecies *Nemastoma suberbum bacuriana* Mkheidze, 1959, is ranked as an independent species, *Paranemastoma bacurianum* (Mkheidze, 1959) (**comb. nov. et stat. nov.**); *Metaplatybunus hypanicus* Šilhavý, 1966, is justified as a junior synonym of *Metaplatybunus georgicus* Mkheidze, 1952 (**syn. nov.**).

Key words

Caucasus Ecoregion, distribution, elevational records, species

Introduction

The composition of the fauna of the Caucasus – the crosspoint of several zoogeographic regions and, in this case, of two continents, Europe and Asia, arouses interest among zoologists, and this applies to harvestmen as well. Many of the local species display limited abilities to disperse and are thus prone to speciation in remote mountain stocks and/or recessed valleys. Thus, we may expect that the Caucasus region is a hotspot of opilionid diversity. Though for decades renowned arachnologist researchers worked on Caucasian harvestmen, our knowledge of species composition, distributional areas, habitat, and elevational preferences of the various species is still in its infancy. Anyhow, e.g., we learned that Nemastomatidae represents a remarkably rich fauna in the area, including endemic genera and highly specialized cavernicolous species. Even more recently, within Russia, close to the Georgian borders, representatives of two remarkable sclerosomatid genera have been detected, making the area even more attractive. The critical list we are presenting here serves as a focal point for further and more intense studies on these amazing arthropods.

Redikorzev (1936) started the research on Caucasian harvestmen in his list of species from the territory of the USSR and included species from Georgia. He described seven new species of the genera *Nemastoma*, *Paranemastoma*, and *Zacheus*. Charitonov (1941, 1945, 1947) published fragmentary data, including several new species of the genera *Giljarovia* and *Nelima* from Georgia. Roewer (1951) left his mark on the Caucasian fauna, but with only two nemastomatid species, one of unclear affiliation. A highlight was the discovery of troglobiontic Nemastomatidae species in the area, which was commendably dealt with by Ljovuschkin and Starobogatov (1963) and Ljovuschkin

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(1972). Additional highly specialized species of the same genus, *Nemaspela*, caused interest over the decades and were published by Martens (2006), Chemeris (2009, 2013), and Martens et al. (2021, 2023).

The Georgian arachnologist Tamara Mkheidze performed the first well-planned investigations of the Georgian harvestmen fauna in the 1950s-1960s (see References). As a result of her studies, she described 13 new species of the genera *Nemastoma*, *Nelima*, *Odiellus*, *Paropilio*, *Phalangium*, *Metaplatybunus*, *Zacheus*, and *Opilio*. Though several of them had to be synonymized afterwards, she provided valuable contributions. Her footprints on the Georgian fauna are noticeable. Deserving are the works of the Polish arachnologist W. Staręga, who devoted a paper to the whole Caucasian fauna (Staręga 1966); for Georgia, he enumerated 16 species, including two novelties of the genera *Lacinius* and *Opilio*, and later summarized even 30 Georgian species (Staręga 1978) in his "Catalogue of the Harvestmen (Opiliones) of the USSR".

Martens (2006) put the Caucasian Nemastomatidae in focus and dealt with 13 species from Georgia, including those of northern Iran, also a part of the Caucasian Ecoregion. He described two genera and eleven species as new, most of them in the Russian part of the Northwest Caucasus, fewer also in Georgia, and even fewer from mountainous northern Iran, the Alborz region. In this paper, it became evident that Nemastomatidae form the backbone of the soil-dwelling Caucasian harvestman fauna in general. Most of the known nemastomatid genera have representatives there.

From the year 1996 onwards, N. Snegovaya started her extended research predominantly on the East Caucasian fauna and devoted three papers to the Georgian fauna as well (Snegovaya 2014, 2022; Snegovaya and Chemeris 2016). She has recorded about 24 species from Georgia, of which four for the first time. Three novelties were described by her from the genera *Phalangium* and *Rilaena* as well.

Barjadze et al. (2015, 2019) reported harvestman species from the Georgian caves, of which eight taxa were determined at the species level and two at the genus level. Later, Barjadze et al. (2019) published a review of cave-dwelling invertebrates and listed four troglobiontic opilionid species.

Materials and methods

The majority of the data, which we are presenting in this paper, were extracted from the current literature on Georgian and Caucasian fauna in general and critically judged. We also included a large amount of valuable unpublished collection data from the second author. From these collections, information on elevational distribution and habitat becomes available.

A great deal of the literature and collection data on the Georgian harvestmen lacked accurate locality data, and precise georeferencing is hardly possible. Nevertheless, to show approximately the coverage of the sample collection effort, we put the locality data on the map as accurately as possible based on locality names (Fig. 1). The map was constructed in QGIS 3.30.3.

The abbreviations used in the following text are as follows: **CaBOL**: Caucasus Barcode of Life Project, Institute of Ecology, Ilia State University, Tbilisi, Georgia; **CJM**: Collection of J. Martens, Johannes Gutenberg Universität Mainz, 55099 Mainz, Germany, and Senckenberg Research Institute, Arachnology, 60325 Frankfurt am Main, Germany.

Results

List of species

Class Arachnida Lamarck, 1801

Order Opiliones Sundevall, 1833

Family Sironidae Leach, 1816

Genus *Parasiro* Hansen and Sørensen, 1904

1. *Parasiro* sp.

Siro sp. – Lange 1969: (t. 4, fig 2, mention, photograph)
Siro sp. – Staręga, 1978: 198 (mention)
Siro sp. – Krivolutsky, 1990: 50–51 (mention)
Parasiro sp. – Karaman, 2022: 56 (fig. 20, discussion of systematic placement)

Remark. Concerning the Cyphophthalmi, Lange (1969) indicates collections of juvenile specimens from the genus *Siro* Latreille, 1796 on the Black Sea coast of Georgia. Staręga (1978) in his catalogue also refers to these data. Krivolutsky (1990) notes the existence of a possibly new species of the genus *Siro*, based on specimens collected from Western Georgia (Borjomi and Sataplia reserves). Karaman (2022) states that the above-mentioned specimens from the Caucasus region belong to the genus *Parasiro*. However, these specimens did not undergo a taxonomic treatment and, consequently, have not yet been determined to species level. It is unclear whether Karaman (2022) saw this material.

Family Dicranolasmatidae Sørensen, 1873

Genus *Dicranolasma* Sørensen, 1873

2. *Dicranolasma giljarovi* Šilhavý, 1966

Dicranolasma giljarovi Šilhavý, 1966: 153–154 (figs 14–20, original description)
Dicranolasma hoberlandti – Staręga, 1966: 390 (mention)
Dicranolasma giljarovi – Staręga, 1978: 200 (mention)
Dicranolasma giljarovi – Snegovaya, 2004: 308 (mention)
Dicranolasma giljarovi – Snegovaya and Chumachenko, 2011: 119 (mention)
Dicranolasma giljarovi – Schönhofer, 2013: 22 (mention)

Type locality. Russia, Sochi, Krasnaya Polyana.

Distribution in Georgia. Batumi Botanical Garden, Kobuleti Municipality, Adjara region (Staręga 1966). In Georgia, the species is widely distributed from Black Sea

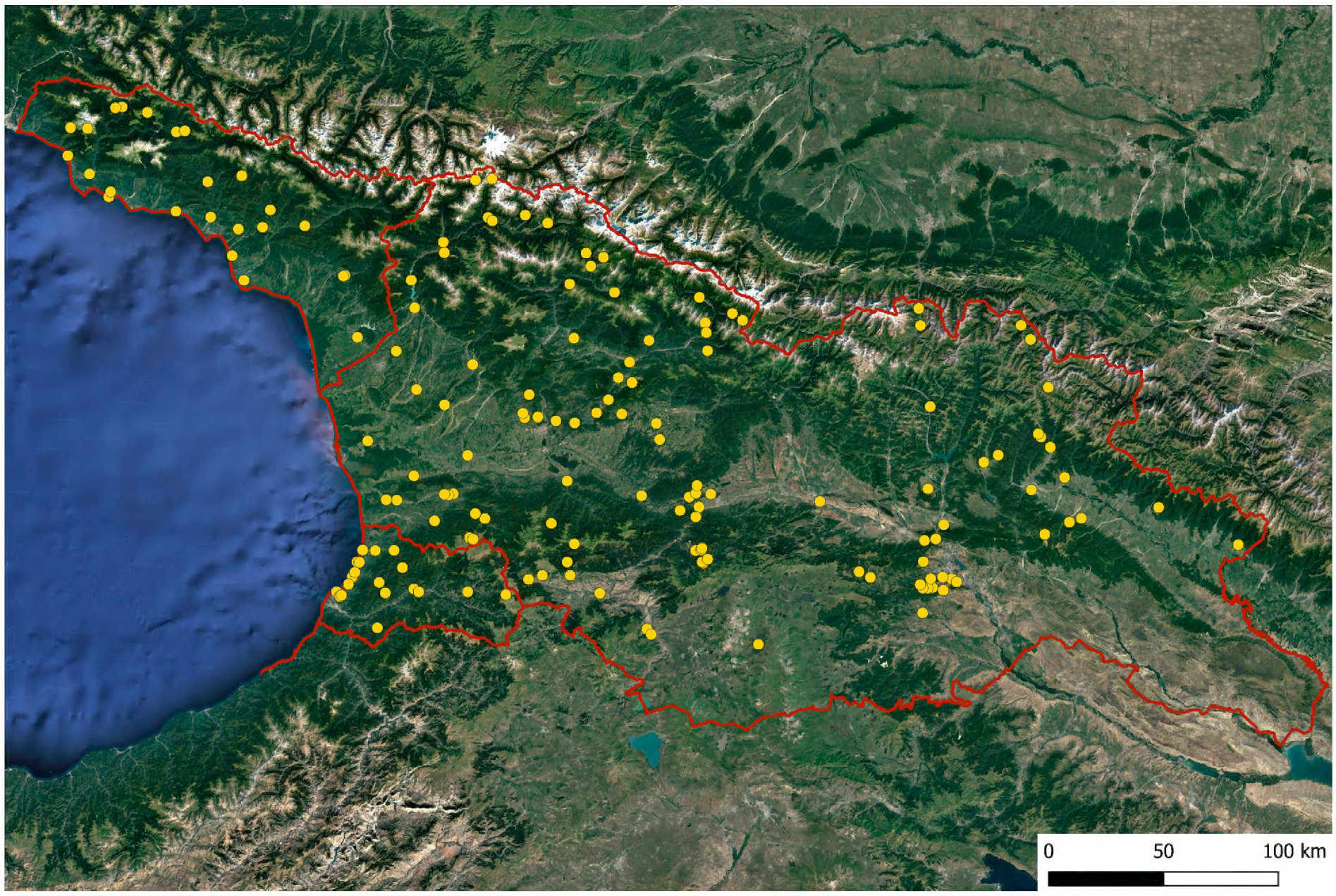

Figure 1. Map of Georgia with collection localities of harvestmen based on literature sources and the provate collection of Jochen Martens.

level to at least 1030 m a.s.l. (CJM). It is unclear whether all populations belong to the same species. Detailed genitalic and genetic investigations are also needed for clear differentiation to Dicranolasma ponticum.

Occurrence data in Georgia. Adjara • 7 km NE of Batumi; 550 m a.s.l.; leg. V. Brachat and H. Meybohm, 9 June 2021 (CJM). • Kintrishi Strict Nature Reserve, Kobuleti Municipality; 430 m a.s.l.; leg. V. Brachat and H. Meybohm, 10 June 2021 (CJM). • Chakvistavi, Kobuleti municipality; 280 m a.s.l.; leg. V. Brachat and H. Meybohm, 20 June 2021 (CJM). **Guria** • Vakijvari, Ozurgeti Municipality; 430 m a.s.l.; leg. V. Brachat and H. Meybohm, 12 June 2021 (CJM). • Villages Tsipa and Pona, Kharagauli municipality; 980–1030 m a.s.l.; leg. J. and B. Martens, 16 July 2019; low *Fagus orientalis* forest, banks of a stream (CJM). **Samegrelo-Zemo Svaneti** • 25 km N of Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens; 20 July 2019; damp broad-leaved forest on a steep slope, ground moss covered (CJM).

Global distribution. Near-endemic to the Caucasian ecoregion. Widely distributed in Georgia, Russian Caucasus, Turkey; Crimea (Staręga 1978; Chemeris and Kovblyuk 2005; Kurt 2014).

3. *Dicranolasma ponticum* Gruber, 1998

Dicranolasma ponticum Gruber, 1998: 513–521 (figs 54–81, original description,)
Dicranolasma ponticum – Snegovaya and Chumachenko, 2011: 119 (mention)
Dicranolasma ponticum – Snegovaya, 2013: 184 (mention)
Dicranolasma ponticum – Schönhofer, 2013: 23 (mention)

Type locality. Turkey, Vilayet Ordu, ca. 5 km NE Ulubey

Occurrence data in Georgia. Imereti • Sataplia State Reserve, Tskaltubo Municipality; S.I. Golovatch and J. Martens, 5 June 1981 (CJM).

Global distribution. Azerbaijan, Georgia, northern Iran, Turkey (Gruber 1998; Snegovaya 2013; Kurt 2014).

Family Trogulidae Sundevall, 1833

Genus *Calathocratus* Simon, 1879

4. *Calathocratus caucasicus* (Šilhavý, 1966)

Platybessobius caucasicus Šilhavý, 1966: 151–153 (figs, 1–13, original description)
Platybessobius caucasicus – Staręga, 1966: 389–390 (mention)
Platybessobius caucasicus – Staręga, 1978: 199 (mention)
Platybessobius caucasicus – Snegovaya, 1999: 453–454 (figs 1–4)
Platybessobius caucasicus – Snegovaya, 2004: 308 (mention)
Calathocratus caucasicus – Snegovaya, 2013: 184 (mention)
Calathocratus caucasicus – Schönhofer, 2013: 51 (mention)

Type locality. Russia, Kuban region, Michajlov.

Occurrence data in Georgia. Adjara • 7 km NE of Batumi; 550 m a.s.l.; leg. V. Brachat and H. Meybohm, 9 June 2021 / 22 May 2018 (CJM). • Gobroneti, Keda Municipality; 1280 m a.s.l.; leg. V. Brachat and H. Meybohm, 24 May 2018 (CJM). • Chakvistavi, Kobuleti Municipality; 280 m

a.s.l.; V. Brachat and H. Meybohm, May 2018 (CJM). • Mt. Peria, Batumi; 257 m a.s.l.; leg. D.V. Logunov, 9 February 1982 (CJM). **Guria** • Vakijvari, Ozurgeti Municipality; 430 m a.s.l.; leg. V. Brachat and H. Meybohm, 12 June 2021 (CJM). **Imereti** • S of Sairme, Baghdati Municipality; 1360 m a.s.l.; leg. V. Brachat and H. Meybohm, 20 May 2018 (CJM). • Baghdati, 290–630 m a.s.l.; leg. V. Brachat and H. Meybohm, 18 May 2018 (CJM). • Kvishkheti, Holy Mountain above the village, Khashuri Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; *Fagus orientalis* forest (CJM). • Villages Tsipa and Pona, Kharagauli Municipality; 980–1300 m a.s.l.; leg. J. and B. Martens, 16 July 2019; Banks of a stream, low *Fagus orientalis* forest (CJM). • Rikoti Pass, northwest of Khashuri; 1000 m a.s.l; leg. J. and B. Martens, 28 May 2023 (CJM). **Samegrelo Zemo Svaneti** • Village Shkedi, 25 km N of Jvari, Lentekhi Municipality, Svaneti region; 600/720 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on a steep slope, ground moss-covered (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • Ghebi, Oni Municipality; 1310 m a.s.l.; leg. V. Brachat and H. Meybohm, 29 May 2021 (CJM). • Likheti, Ambrolauri Municipality; 1090 m a.s.l.; leg. V. Brachat and H. Meybohm, 17 June 2021 (CJM). • S of Panaga, Lentekhi Municipality; 1250 m a.s.l.; leg. V. Brachat and H. Meybohm, 16 June 2021 (CJM). **Samtskhe-Javakheti** • Tsemistskali, Borjomi Municipality;; 1200–1600 m a.s.l.; leg. J. and B. Martens (CJM). • Timothesubani, Holy Dormition Church, Borjomi Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; mixed forest along a stream (CJM). **Kakheti** • Birkiani, Akhmeta Municipality; 930–110 m a.s.l.; leg. J. and B. Martens, 31 July 2019; mixed broad-leaved forest, river banks (CJM).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Caucasian Russia, Azerbaijan, Turkey (Staręga 1978; Snegovaya 2013; Kurt 2014).

Remarks. Vertical distribution within Georgia is recorded from 257 m to 1360 m a.s.l (CJM). The distinct body sizes and proportions observed in specimens from various populations indicate the involvement of not just one, but several locally restricted species. In specific areas, specimens with diverse sizes and proportions coexist, potentially indicating the presence of different species.

Genus *Trogulus* Latreille, 1802

5. *Trogulus rossicus* Šilhavý, 1968

Trogulus rossicus Šilhavý, 1968: 25–29 (figs 1–7, original description)
Trogulus rossicus – Snegovaya, Pkhakadze and Intskirveli, 2014: 198 (mention; single locality data from historical collection of the Georgian National Museum)

Type locality. Russia, Southwest Caucasus, Krasnodar Krai, Goryachy klyuch.

Occurrence data in Georgia. Imereti • Nakerala Pass, Tkibuli Municipality; 1320 m a.s.l.; leg. V. Brachat and H. Meybohm, 22 May 2016 (CJM). • S of Sairme, Baghdati Municipality; 1760–2220 m a.s.l.; leg. V. Brachat and H. Meybohm, 19 May 2018 (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • 4 km NW of Nikortsminda, Ambrolauri Municipality; 1395 m a.s.l.; leg. V. Brachat and H. Meybohm, 23 May 2016 (CJM). • S of Lailashi, Tsageri Municipality; 520 m a.s.l.; leg. V. Brachat and Meybohm, 21 May 2016 (CJM). **Samtskhe-Javakheti** • Abastumani N, Adigeni Municipality; 1215 m a.s.l.; 15 May 2016; leg. V. Brachat and H. Meybohm (CJM). **Shida Kartli** • 8 km SW of Surami, Khashuri Municipality; 960 m a.s.l.; leg. V. Brachat and H. Meybohm, 14 May 2016 (CJM). **Mtskheta-Mtianeti** • Katsalkhevi, Dusheti Municipality; 1300 m a.s.l.; leg. J. and B. Martens, 3 June 2023 (CJM). • Saguramo State Reserve, Mtskheta Municipality; 1100–1200 m a.s.l.; leg. S. Golovatch and K. Eskov, 20 May 1987; *Fagus*, *Carpinus*, *Acer* etc. forest (CJM). **Kakheti** • surroundings of Telavi; leg. V.N Fursov, April 1907 (Snegovaya et al. 2014). • Batsaro State Reserve, 20 km N of Akhmeta, Akhmeta Municipality; 800–850 m a.s.l.; leg. S. Golovatch and K. Eskov, 5–6 May 1987; *Fagus-Castanea* forest (CJM). • Birkiani, Akhmeta Municipality; 930–110 m a.s.l.; leg. J. and B. Martens, 31 July 2019; mixed broad-leaved forest, river banks (CJM). • Babaneuri State Reserve, 16 km NE of Akhmeta, Akhmeta Municipality; 500 m a.s.l.; leg. S. Golovatch and K. Eskov, 4–5 May 1987; *Fagus*, *Quercus*, *Carpinus* etc. forest, litter (CJM). • N of Kvareli, Kvareli Municipality; 700–750 m a.s.l.; leg. S. Golovatch and K. Eskov, 4 May 1987; *Fagus*, *Carpinus*, *Quercus* etc. forest, litter and under bark (CJM).

Global distribution. Endemic to the Caucasian ecoregion where it is widely though patchily distributed (Unpublished data by J. Martens; Snegovaya 2013).

Remarks. In Georgia the species seems to be patchily distributed; altitudinal records span from 520 m a.s.l to 2220 m a.s.l (CJM). The conspecifity of the known scattered Caucasian populations was never checked.

Family Nemastomatidae Simon, 1872

Genus *Giljarovia* Kratochvíl, 1958

6. *Giljarovia redikorzevi* (Charitonov, 1946)

Nemastoma redikorzevi Charitonov, 1946: 145–146 (fig. 1, original description)
Nemastoma redikorzevi – Birstein, 1950: 356 (mention)
Malekia redikorzevi – Ljovushkin and Starobogatov, 1963: 49 (mention)
Nemastoma redikorzevi – Mkheidze, 1964: 119 (mention)
Malekia redikorzevi – Ljovushkin, 1972: 62–63, fig. 1 (redescription, distribution)
Malekia redikorzevi – Staręga, 1978: 201 (mention)
Giljarovia redikorzevi – Martens, 2006: 165–167 (figs 10–11, redescription, distribution, new records)
Giljarovia redikorzevi – Schönhofer, 2013: 29 (mention)
Giljarovia redikorzevi – Snegovaya, 2013: 184 (mention)
Giljarovia redikorzevi – Snegovaya, 2015: 182–185 (figs 1–10, redescription, distribution)

Type locality. Georgia, Imereti, Tskaltubo municipality, Sataplia-Tskaltubo karst massif, Sataplia Cave.

Occurrence data in Georgia. Imereti • Sataplia I Cave, Tskaltubo Municipality; 400 m a.s.l.; leg. Golovatch and J.

Martens, 5 June 1981 (Martens 2006). • Sataplia I Cave, Tskaltubo Municipality; leg. Golovatch, 15 October 1981 (Martens 2006). • Sataplia I Cave, Tskaltubo Municipality; leg. O. Makarova, 1 January 1987 (Martens 2006). • Satplia IV cave, Tskaltubo Municipality; leg. R.A. Dzhanashvili and S.I. Ljovushkin, 22 September 1968 (Ljovushkin 1972). • Tsutskhvati Cave, Tkibuli Municipality; leg. Golovatch, 24/25 October 1981 (Martens 2006).

Global distribution. Endemic to Georgia (Schönhofer 2013; Snegovaya 2013, 2015).

Remarks. Though most records originate from caves, this is not a troglobiontic species; it occurs also in forest soil litter.

7. *Giljarovia tenebricosa* (Redikorzev, 1936)

Nemastoma tenebricosum Redikorzev, 1936: 34–35 (figs 1–2, 14, original description)
Nemastoma tenebricosum – Mkheidze, 1964: 118 (mention)
Nemastoma tenebricosum – Staręga, 1978: 204 (mention)
Giljarovia tenebricosa – Martens, 2006: 152--155 (figs. 2--3, 13l – m, redescription, distribution, new records)
Giljarovia tenebricosa – Schönhofer, 2013: 29 (mention)
Giljarovia tenebricosa – Snegovaya, 2013: 184 (mention)

Type locality. Georgia, Abkhazia, Gudauta Municipality, Zeda Tsebelda.

Occurrence data in Georgia. Abkhazia • Zeda tsebelda, Gudauta Municipality; leg. M. Kalichevsky, 3 September 1905 (Redikorzev 1936). • Pskhu-Gumista Strict Nature Reserve, Sokhumi Municipality; leg. J. Bohac, 6 June 1982 (Martens 2006). • Bichvinta-Miusera Nature Reserve, Gudauta Municipality; 20–130 m a.s.l.; leg. S.I. Golovatch, 8–10 April 1983; mixed deciduous forest (Martens 2006). • Pskhu, Bzipi Valley, Sokhumi Municipality; 700–950 m a.s.l.; leg. S.I. Golovatch, 15–16 August 1986; *Fagus*, *Quercus*, *Castanea* etc. forest, litter, under bark and stones (Martens 2006). • Pass Anchkho, SE of Lake Ritsa; 2000 m a.s.l.; leg. S.I. Golovatch, 16 August 1986 (Martens 2006). **Adjara** • Zeraboseli, Kintrishi National Park; 450–600 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1–3 June 1981 (Martens 2006). • Batumi Botanical Garden, Kobuleti Municipality; 20–150 m a.s.l.; leg. S.I. Golovatch and J. Martens, 5–7 June 1981 (Martens 2006). • 6 km W of Khulo; 800 m a.s.l.; leg. S.I. Golovatch, 11 October 1981 (Martens 2006). • Zeraboseli, Kintrishi National Park; 800 m a.s.l.; leg. S.I. Golovatch, 13 October 1981 (Martens 2006). • Chikuneti, Khelvachauri Municipality; 580 m a.s.l.; leg. Brachat and H. Meybohm, 23 May 2018 (CJM). **Samegrelo-Zemo Svaneti** • Chaladidi, Khobi Municipality; leg. S.I. Golovatch, 13 April 1983 (Martens 2006). • Kherkhvashi, Mestia Municipality; 1250–1700 m a.s.l.; leg. S.I. Golovatch, 21 August 1986; *Quercus*, *Fagus*, *Carpinus*, *Picea*, *Abies* etc. forest, litter and bark (Martens 2006). • Nenskra Canyon, Lakhi, N of Khaishi; appr. 800 m a.s.l.; leg. A.B. Ryvkin, 2 September 1986 (Martens 2006). • Khaishura Canyon, near Khaishi, Mestia Municipality; 600 m a.s.l.; leg. A.B. Ryvkin, 5 September 1986 (Martens 2006). • 40 km W of Mestia, above Kherkhvashi; 1900–2200 m a.s.l.; leg. S.I. Golovatch, 21 September 1986; timberline (Azalea, Picea, Abies) and subalpine meadows (Martens 2006). • Lakhamula, Mestia Municipality; 1110 m a.s.l.; leg. J. and B. Martens, 21 July 2019; open broad-leaved forest (CJM). • 25 km N Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on a steep slope, covered with ground moss (CJM). • Mestia; 1910–1650 m a.s.l.; leg. J. and B. Martens, 22 July 2019; mixed forest (CJM). • Ushguli, Mestia Municipality; 2190 m a.s.l.; leg. V. Brachat and H. Meybohm, 30 June 2017 (CJM). **Guria** • near Bakhmaro, Chokhatauri Municipality; 1950–2020 m a.s.l.; leg. S.I. Golovatch and J. Martens, 8 June 1981 (Martens 2006). • Kvabgha, Chokhatauri Municipality; 680 m a.s.l.; leg. V. Brachat and H. Meybohm, 11 June 2021 (CJM). **Imereti** • Sataplia State Reserve, Kutaisi Municipality; 400 m a.s.l.; leg. S.I. Golovatch and J. Martens, 5 June 1981 (Martens 2006). • S of Sairme, Baghdati Municipality; 1760–2220 m a.s.l.; leg. V. Brachat and H. Meybohm, 19 May 2018 (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • Ghurshevi, Oni Municipality; 2000–2200 m a.s.l.; leg. S.I. Golovatch, 21 October 1981; Pass, *Abies*, *Fagus*, *Ulmus*, litter and under stones, near spring (Martens 2006). • between Tkibuli and Nikortsminda, Tkibuli Municipality; leg. S.I. Golovatch, 22 October 1981 (Martens 2006). • Mukhura, Tkibuli Municipality; 700–800 m a.s.l.; leg. S.I. Golovatch and K.Y Eskov, 7–9 May 1987 (Martens 2006).• Nakerala Pass, Ambrolauri Municipality; 1320 m a.s.l.; leg. V. Brachat and H. Meybohm, 22 May 2016 (CJM). • 4km NW of Nikortsminda, Ambrolauri Municipality; 1395 m a.s.l.; leg. V. Brachat and H. Meybohm, 23 May 2016 (CJM). **Samtskhe-Javakheti** • Baniskhevi Valley, Borjomi-Kharagauli National Park; 800–900 m a.s.l.; leg. S.I. Golovatch, 12–16 May 1983 (Martens 2006). • 15 km W of Adigeni, Adigeni Municipality; 1500–1700 m a.s.l.; leg. S.I. Golovatch, 14–15 May 1983 (Martens 2006). **Shida Kartli** • Surami; 1000 m a.s.l.; leg. S.I. Golovatch, 14 April 1983 (Martens 2006). • Surami Range; 850 m a.s.l.; leg. S.I. Golovatch and K.Y. Eskov, 7 May 1987; *Alnus*, *Fagus*, *Rhododendron* etc. forest, litter (Martens 2006). • Algeti National Park, Tetritskaro Municipality; 1400–1450 m a.s.l.; leg. S.I. Golovatch and K.Y. Eskov, 16–18 May 1987 (Martens 2006). • 8 km SW of Surami, Khashuri Municipality; 960 m a.s.l.; leg. V. Brachat and H. Meybohm, 14 May 2016 (CJM). • Kvishketi, Khashuri Municipality; 830 m a.s.l.; leg. J. and B. Martens, 16 July 2019; mixed forest, mainly *Picea orientalis*, on stream banks (CJM). Mtsketa-Tianeti • 10 km N of Jvari, Mtskheta Municipality; 800 m a.s.l.; leg. S.I. Golovatch, 20–21 August 1986 (Martens 2006). **Kakheti** • Lagodekhi National Park, Lagodekhi Municipality; 600–700 m a.s.l.; leg. S.I. Golovatch, 5–6 May 1983 (Martens 2006). • Kvareli; 700–750 m a.s.l.; leg. S.I. Golovatch and K.Y. Eskov, 4 May 1987 (Martens 2006).

Global distribution. Endemic to the Caucasian ecoregion. Records from Georgia, Russian Caucasus and Turkey (Martens 2006; Snegovaya 2013; Kurt 2014).

Remarks. The elevational records span from 580 m a.s.l to 2220 m a.s.l. (CJM). The male cheliceral apophysis shows quite different dimensions, especially length and outline. It should be clarified if all different-sized populations belong to the same species.

8. *Giljarovia triangula* Martens, 2006

Giljarovia triangula Martens, 2006: 156–159 (figs 4–5, 8, 13i-k, original description, distribution, elevational records, relationships)
Giljarovia triangula – Schönhofer, 2013: 29 (mention)
Giljarovia triangula – Snegovaya, 2013: 184 (mention)

Type locality. Georgia, Mtskheta-Mtianeti region, Stepantsminda.

Occurrence data in Georgia. Mtskheta-Mtianeti • Stepantsminda (=Kazbegi), Stepantsminda Municipality; 2000 m a.s.l.; leg. S.I. Golovatch, 2/6 June 1982; forests of *Betula* and *Pinus*, in meadows, litter and under stones (CJM). • Near Sno, Stepantsminda Municipality; 1750 m a.s.l.; leg. J. and B. Martens, 6 June 2023; in litter in mixed broad leave forest, mainly *Betula* sp. (CJM).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, the north-western part of the Russian Caucasus (Martens 2006; Schönhofer 2013; Snegovaya 2013).

Remarks. The only Georgian records are at 1750 m a.s.l. and 2000 m a.s.l. Apparently, this is a high-altitude species. In the Russian Northwest Caucasus, its geographic strongholds, most records are situated above 1500 m a.s.l, the highest at 2150 m a.s.l. (Martens 2006), the lowest at 1750 m a.s.l. (CJM).

9. *Giljarovia vestita* Martens, 2006

Giljarovia vestita Martens, 2006: 161, 163, 165 (figs 9–10, 13c-f, original description, distribution, elevational records, relationships)
Giljarovia vestita – Snegovaya and Chumachenko, 2011: 119 (mention)
Giljarovia vestita – Snegovaya, 2013: 184 (mention)
Giljarovia vestita – Schönhofer, 2013: 29 (mention)
Giljarovia vestita – Snegovaya, Pkhakadze and Intskirveli, 2014: 199 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Russia, Krasnodar krai, Caucasian State Reserve, Pslukh, 20 km E of Krasnaya Polyana, Mt. Kogot.

Occurrence data in Georgia. Abkhazia • Mountain Apiancha, Tsebelda, Gudauta Municipality; 2500 m a.s.l.; leg. Y.V. Voronov, 9 September 1908 (Snegovaya et al. 2014). • Miusera Reserve, Gudauta Municipality; 20–130 m a.s.l.; leg. S.I. Golovatch, 8/10 April 1983; mixed deciduous forest (*Castanea*, *Alnus* etc .), litter, under bark and stones (CJM). • Ritsa Lake, Gudauta Municipality; 950–1100 m a.s.l.; leg. S.I. Golovatch, 13/14 August 1986; *Fagus*, *Picea* , *Acer* etc. forest, litter, under bark and stones (CJM). • Pskhu, Bzyb valley, Sokhumi Municipality; 700–950 m a.s.l.; leg. S.I. Golovatch, 15/16 August 1986; *Fagus*, *Quercus*, *Castanea* etc. forest, litter, under bark and stones (CJM). • Tsebelda, Gulripshi Municipality; 300 m a.s.l.; leg. S.I. Golovatch, 19 August 1986; *Carpinus*, *Acer*, *Buxus* scrub, litter (CJM). **Samegrelo-Zemo Svaneti** • 10 km N of Jvari, Tsalenjikha Municipality; 800 m a.s.l.; leg. S.I. Golovatch, 20/21 August 1986; moist *Buxus*, *Fagus*, *Picea*, *Taxus* etc. forest, litter (CJM).

Global distribution. Endemic to the Caucasian ecoregion. Georgia, Turkey, Russian Caucasus (Martens 2006; Snegovaya 2013; Kurt 2014).

Remarks. The elevational record in Georgia extends from 290 m a.s.l to 2500 m a.s.l (CJM).

Genus *Histricostoma* Kratochvíl, 1958

10. *Histricostoma caucasicum* (Redikortsev, 1936)

Nemastoma caucasicum Redikorzev, 1936: 37 (figs 7–8, 14, original description)
Nemastoma caucasicum – Roewer, 1951: 135 (fig. 65, redescription)
Nemastoma caucasicum – Mkheidze, 1964: 118 (mention)
Histricostoma (*Histricostoma*) *caucasicum* – Staręga, 1966: 394 (fig. 8, redescription)
Histricostoma caucasicum – Staręga, 1978: 201 (mention)
Histricostoma caucasicum – Martens, 2006: 192–195 (figs 21a-b, 26–27, redescription, distribution, elevational records, relationships)
Histricostoma caucasicum – Snegovaya, Pkhakadze and Intskirveli, 2014: 199 (mention)
Histricostoma caucasicum – Schönhofer, 2013: 30 (mention)
Histricostoma caucasicum – Snegovaya, 2013: 185 (mention)

Type locality. Georgia, Abkhazia, Sokhumi Municipality, villages Ažary and Lata.

Occurrence data in Georgia. Abkhazia • Sokhumi; leg. M. Kalichevsky, 10 August 1905 / 1 September 1905 (Redikorzev 1936). • Mountain Apiancha, Tsebelda, Gudauta Municipality; 2500 m a.s.l.; leg. Y.V. Voronov, 9 September 1908 (Snegovaya et al. 2014). • Ritsa Lake, Gudauta Municipality; 950–1100 m a.s.l.; leg. S.I. Golovatch, 13/14 August 1986; *Fagus*, *Abies*, *Picea*, *Acer* etc. forest, litter, under bark and stones (CJM). • Pskhu, Sokhumi Municipality; 700–950 m a.s.l.; leg. S.I. Golovatch, 15/16 August 1986; *Fagus*, *Quercus*, *Castanea* etc. forest, litter, under bark and stones (CJM). **Adjara** • Batumi Botanical Garden, Kobuleti Municipality; leg. B. Pisarksi, 10 November 1963 (Staręga 1978). • Zeraboseli, Kintrish State Reserve, Kobuleti Municipality; 450–600 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1/3 June 1981 (CJM). • Zeraboseli, Kintrish State Reserve, Kobuleti Municipality; 600–800 m a.s.l.; leg. S.I. Golovatch and J. Martens, 2 June 1981 (CJM). • Batumi Botanical Garden; 20–150 m a.s.l.; leg. S.I. Golovatch and J. Martens, 5/7 June 1981 (CJM). • Batumi Botanical Garden; leg. S.I. Golovatch, 9 October 1981 (CJM). • 3 km W of Danisparauli, Khulo Municipality; leg. S.I. Golovatch and J. Martens, 10 October 1981; deciduous forest, litter (CJM). • Zeraboseli, Kintrish State Reserve, Kobuleti Municipality; 450–600 m a.s.l.; leg. S.I. Golovatch, 13 November 1981; deciduous forest, litter and under stones (CJM). • 6 km W of Khulo, Khulo Municpality; 800 m a.s.l.; leg. S.I. Golovatch, 11 November 1981; deciduous forest on rocky slope, litter (CJM). • 7 km NE of Batumi; 550 m a.s.l.; leg. V. Brachat and H. Meybohm, 9 June 2021 (CJM). • Chakvistavi, Kobuleti Municipality; 280 m a.s.l.; leg. V. Brachat and H. Meybohm, June 2021 (CJM). **Samegrelo-Zemo Svaneti** • 10 km N of Jvari, Tsalenjik-

ha Municipality; 800 m a.s.l.; leg. S.I. Golovatch, 20/21 August 1986; *Buxus*, *Fagus*, *Picea*, *Taxus* etc. forest, litter (CJM). • Kherkhvashi, 40 km W of Mestia, Mestia Municipality; 1250–1700 m a.s.l.; leg S.I. Golovatch, 21 August/ 21 September 1986; *Quercus*, *Fagus*, *Carpinus*, *Picea*, *Abies* etc. forest, litter and bark (CJM). • Nenskra valley, Mestia Municipality; 800 m a.s.l.; leg. A.B. Ryvkin, 2 September 1986 (CJM). • Khaishi, Mestia Municipality; 600 m a.s.l.; leg. A.B. Ryvkin, 5 September 1986 (CJM). • Enguri valley, Mestia Municipality; 1000 m a.s.l.; leg. A.B. Ryvkin, 19 September 1986 (CJM). • W of Dizi, Mestia Municipality; leg. A.B Ryvkin, 19 September 1986 (CJM). • Mestia; 1500 m a.s.l.; leg. S.I. Golovatch, 16 September 1986 (CJM). • 40 km W of Mestia, Mestia Municipality; 1900–2200 m a.s.l; leg. S.I. Golovatch, 21 September 1986. • Mestia; 1910–1650 m a.s.l.; leg. J. and B. Martens, 22 July 2019; mixed forest (CJM). • Latpari Pass, Mestia Municipality; 1510–2100 m a.s.l.; leg. V. Brachat and H. Meybohm, 16 June 2021 (CJM). • 25 km N of Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on a steep slope, ground moss covered (CJM). • Lakhamula, Mestia Municipality; 1110 m a.s.l.; leg. J. and B. Martens, 21 July 2019; open broad-leaved forest (CJM). **Imereti** • Sataplia State Reserve; 400 m a.s.l.; leg. S.I. Golovatch and J. Martens, 5 June 1981 (CJM). • between Tkibuli and Nikortsminda, Tkibuli Municipality; leg. S.I. Golovatch, 22 October 1981; *Abies* and *Fagus* forest, litter (CJM). • Mukhura, Tkibuli Municipality; 700–800 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 7/9 May 1987; *Castanea*, *Fagus*, *Carpinus* etc., forest, litter, under bark and stones (CJM). • Villages Tsipa and Pona, Kharagauli Municipality; 980–1030 m a.s.l.; leg. J. and B. Martens, 16 July 2019; low *Fagus orientalis* forest, banks of a stream (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • Timotesubani monastery, Borjomi Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; mixed forest along a stream (CJM). • Village Shkedi, Lentekhi Municipality; 720 m a.s.l.; leg. J. and B. Martens, 20 July 2019 (CJM). • S of Panaga, Lentekhi Municipality; 1250 m a.s.l.; leg. V. Brachat and H. Meybohm, 16 June 2021 (CJM). • Likheti, Ambrolauri Municipality; 1090 m a.s.l.; leg. V. Brachat and H. Meybohm, 17 June 2021 (CJM). **Samtskhe-Javakheti** • 15 km W of Adigheni, Adigeni Municipality; 1500–1700 m a.s.l.; leg. S.I. Golovatch, 14/15 May 1983; *Abies*, *Picea*, *Fagus*, *Acer* etc. forest, litter, logs, under stones (CJM). • 8 km SE of Akhaldaba, Borjomi Municipality; 1000 m a.s.l.; leg. S.I. Golovatch, 12 May 1983; Nedzura River valley, *Picea*, *Carpinus* and *Fagus* forest, litter, logs (CJM). • Borjomi-Kharagauli National Park; 800–900 m a.s.l.; leg. S.I. Golovatch, 12/16 May 1983; *Picea*, *Fagus* and *Carpinus* forest, litter, logs, under stones (CJM). • Borjomi; 960 m a.s.l.; leg. J. and B. Martens, 17 July 2019; park and forest along the Mtkvari river and small stream, mixed broad-leaved forest (CJM). Shida Kartli • Surami, Khashuri Municipality; 850 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 7 May 1987 (CJM). • Mariamjvari Nature Reserve, Sagarejo Municipality; 1150–1250 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 13/14 May 1987; *Fagus*, *Carpinus*, *Acer*, *Pinus* etc. forest, litter, under bark and stones (CJM). • Algeti National Park, Tetritskaro Municipality; 1400–1450 m a.s.l.; leg. S.I. Golovatch and Eskov, 16/18 May 1987; *Fagus*, *Picea*, *Acer* etc. forest, litter and under bark (CJM). • SW of Patara Dmanisi, Bolnisi Municipality; 1000–1050 m a.s.l.; leg. S.I. Golovatch and Eskov, 21 May 1987; *Quercus*, *Fagus*, *Acer* etc. forest, litter (CJM). • S of Khorisari Pass, Kazbegi Municipality; 1500 m a.s.l.; leg. S.I. Golovatch, 17 October 1987; Fagus, Betula etc. forest, litter (CJM). • SW of Nikortsminda, Ambrolauri Municipality, 1050 m a.s.l.; leg. S.I. Golovatch, 19 October 1987; *Fagus*, *Abies*, *Acer* etc. forest (CJM). • Kvishketi, Holy Mountain above the village; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; *Fagus orientalis* forest (CJM). • Khashuri Municipality; 830 m a.s.l.; leg. J. and B. Martens, 16 July 2019; mixed forest, mainly *Picea orientalis*, on stream banks (CJM). Mtskheta-Mtianeti • Mtskheta; leg. Roszkowski, 3 May 1918 (Staręga 1978). **Kakheti** • Lagodekhi Nature Reserve, Lagodekhi Municipality; 600–700 m a.s.l.; leg. S.I. Golovatch, 5/6 May 1983; *Fagus*, *Fraxinus*, *Acer* etc. forest, litter, logs, under stones (CJM).• N of Kvareli; 700–750 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 4 May 1987; *Fagus*, *Carpinus*, *Quercus* etc. forest, litter and under bark (CJM). • 20 km N of Akhmeta, Batsaro State Reserve; 800–850 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 5/6 May 1987; *Fagus*, *Castanea* forest, litter (CJM). • Dzveli Shuamta's Monastery, Telavi Municipality; leg. J. and B. Martens, 28 July 2019; old *Fagus orientalis* forest (CJM). • Gombori Pass, Sagarejo Municipality; 1500–1600 m a.s.l.; leg. J. and B. Martens, 28 July 2019; bushes along the stream (CJM). • Birkiani, Akhmeta Municipality; 930–1100 m a.s.l.; leg. J. and B. Martens, 31 July 2019; side valley, mixed broad-leaved forest, river banks (CJM).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Azerbaijan, Russian Caucasus, Armenia, Turkey (Staręga 1978; Martens 2006; Schönhofer 2013; Snegovaya 2013).

Remarks. In Georgia the species is widely distributed and it is the most common species of the small litter-inhabiting nemastomatids. In Georgia, its known elevational distribution spans from 280 m to 2100 m (CJM); for records beyond Georgia see Martens (2006).

Genus *Mitostoma* Roewer, 1951

11. *Mitostoma gracile* (Redikorzev, 1936)

Nemastoma gracile Redikorzev, 1936: 39–40 (figs 9–10, original description)
Nemastoma gracile – Mkheidze, 1964: 119 (mention)
Mitostoma (*Carinostoma*) *gracile* – Staręga, 1966: 394 (mention)
Mitostoma gracile – Staręga, 1978: 202 (mention)
Mitostoma gracile – Snegovaya, 2004: 309, 311 (figs 14–19) (mention)
Mitostoma gracile – Martens, 2006: 207–209 (figs 34–35, redescription, distribution, elevational records, relationships)
Mitostoma gracile – Snegovaya, 2013: 185 (mention)

Type locality. While naming *Nemastoma gracile* Redikorzev (1936) mentioned two localities: Georgia, Abkhazia, Gagra and Russia, Krasnodar Krai, Sochi Municipality without restricting the **Type locality.** For taxonomic clarity Staręga (1978) chose Sochi.

Occurrence data in Georgia. Abkhazia • Sochi; leg. A. Bikov, 2 February 1900 (Redikorzev 1936). • Gagra; leg. I. Sokolov, June 1916 (Redikorzev 1936). • Lake Ritsa, Gudauta Municipality; 950–1100 m a.s.l.; leg. S.I. Golovatch, 13/14 July 1986; *Fagus*, *Abies*, *Picea*, *Acer* etc. forest, litter, under bark and stones (Martens 2006). • MFTI Cave, Bzipi (=Bzybskii) Massif, Gagra Municipality; leg. N. Myuge, 30 July 1986 (Martens 2006). **Adjara** • Zeraboseli in Kintrishi Strict Nature Reserve, Kobuleti Municipality; 450–500 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1–3 June 1981 / 13 October 1981; deciduous forest, litter and under stones (Martens 2006). **Samegrelo-Zemo Svaneti** • Nenskra Canyon, Mestia Municipality; 800 m a.s.l.; leg. A.B. Ryvkin, 2 September 1986 (Martens 2006). • 25 km N of Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on steep slope, ground moss covered (CJM). • Mestia; 1910–1650 m a.s.l.; leg. J. and B. Martens, 22 July 2019 (CJM). • Lakhamula, Mestia Municipality; 1110 m a.s.l.; leg. J. and B. Martens, 21 July 2019; open broad-leaved forest (CJM). **Samtskhe Javakheti** • Borjomi; 960 m a.s.l.; leg. J. and B. Martens, 17 July 2019; mixed broad-leaved forest (CJM). **Shida Kartli** • Holy Mountain above Kvishketi village, Khashuri Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 16 July 2019; mixed forest, mainly *Fagus orientalis*, on stream banks (CJM). **Mtskheta-Mtianeti** • Armazi Valley, Mtskheta Municiplaity; leg. V. Roszkowski, 3 May 1918 (Staręga 1966). **Kakheti** • Batsara Nature Reserve, Akhmeta Municipality; 800–850 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 16 May 1987; *Fagus*, *Castanea* forest, litter (Martens 2006).

Global distribution. Near-endemic to the Caucasian ecoregion. Georgia, Azerbaijan, Russia, Turkey (Staręga 1976; Martens 1978, 2006; Schönhofer 2013; Snegovaya 2013); Greece (CJM), Bulgaria (Staręga 1978).

Remarks. The altitudinal records span from 600 m a.s.l. to 1910 m a.s.l. (CJM).

Genus *Nemaspela* Šilhavý, 1966

12. *Nemaspela abchasica* (Ljovuschkin and Starobogatov, 1963)

Buresiolla abchasica Ljovuschkin and Starobogatov, 1963: 47–49 (fig. 5, original description)
Nemaspela abchasica – Staręga, 1978: 202 (mention)
Nemaspela abchasica – Martens, 2006: 173–175 (figs 13n-o, 16–17, redescription, new locality record)
Nemaspela abchasica – Chemeris, 2009: 287–289 (figs 1, 11, mention)
Nemaspela abchasica – Schönhofer, 2013: 35 (mention)
Nemaspela abchasica – Snegovaya, 2013: 184 (mention)

Type locality. Georgia, Abkhazia, Gulripshi Municipality, Tsebelda karst massif, Kveda Shakurani Cave.

Occurrence data in Georgia. Abkhazia • Kveda Shakurani Cave, Gulripshi Municipality; leg. S.I. Lyovuschkin, 27 July 1961 (Ljovuschkin and Starobogatov 1963). • L-24 Cave, Gudauta Municipality; leg. N. Myuge, 28 August 1986 (Martens 2006). • Kuibishevi Cave, Gagra Municipality; leg. V. Kiselev, August 1986 (Martens 2006). • Shakurani Cave, Gulripshi Municipality; leg. R.S. Vargovitsh, 4 June 2006 (Chemeris 2009).

Global distribution. Endemic to caves of the western Caucasus, in Georgia and Russian Caucasus (Martens 2006; Schönhofer 2013; Snegovaya 2013).

13. *Nemaspela birsteini* Ljovuschkin, 1972

Nemaspela birsteini Ljovuschkin, 1972: 66–70 (figs 2–3, original description)
Nemaspela birsteini – Staręga, 1978: 202 (mention)
Nemaspela birsteini – Chemeris, 2009: 289–291 (figs 9, 19, 24, 29, 33, redescription)
Nemaspela birsteini – Schönhofer, 2013: 35 (mention)

Type locality. Georgia, Abkhazia, Sokhumi Municipality, Gumishta-Psirtskha karst massif, Zemo Eshera Cave; Gudauta Municipality, Duripshi plateau, Tarkiladze (=Tarkili) Cave.

Occurrence data in Georgia. Abkhazia • Tarkiladze Cave, Gudauta Municipality; leg. Y.A. Birstein, 7 August 1939 (Ljovuschkin 1972). • Zemo Eshera Cave, Sokhumi Municipality; leg. N.T. Zalesskaya, 17 July 1965 (Ljovuschkin 1972).

Global distribution. Endemic to caves of Georgia (Schönhofer 2013).

14. *Nemaspela femorecurvata* Martens, 2006

Nemaspela femorecurvata Martens, 2006: 171–173 (figs 14a-k-15, 17, original description)
Nemaspela femorecurvata – Schönhofer, 2013: 35 (mention)
Nemaspela femorecurvata – Snegovaya, 2013: 184 (mention)

Type locality. Georgia, Racha-Lechkhumi region, Ambrolauri Municipality, Racha Karst massif, Sakishore Cave.

Occurrence data in Georgia. Abkhazia • Khabiu Cave?, Gudauta Municipality; leg. V. Kiselyov, 1990 (Martens 2006). **Racha-Lechkhumi and Kvemo Svaneti** • Sakishore Cave, Racha karst massif, Ambrolauri Municipality; leg. V. Bogdanov, 23 January 1987 (Martens 2006) (Holotype in CJM, paratype in Moscow Museum).

Global distribution. Endemic to a cave of Georgia (Martens 2006; Schönhofer 2013; Snegovaya 2013).

Remarks. The record of this troglobitic species from a non-cave remote place in Khabiu is most likely erroneous.

15. *Nemaspela gagrica* Chemeris, 2013

Nemaspela gagrica Chemeris, 2013: 41–43 (figs 1–6, original description, relationships)
Nemaspela gagrica – Snegovaya, 2013: 184 (mention)
Nemaspela gagrica – Turbanov, Demidov, Kolesnikov and Turbanova, 2018: 363 (mention)

Type locality. Georgia, Abkhazia, Gagra Municipality, Arabika karst massif, Sarma Cave.

Occurrence data in Georgia. Sarma and Veryovkina caves, Arabika karst massif, Gagra Municipality, Abkhazia region (Chemeris 2013; Turbanov et al. 2018).

Global distribution. Endemic to caves of Georgia (Chemeris 2013; Turbanov et al. 2018).

16. *Nemaspela melouri* Martens, Maghradze and Barjadze, 2021

Nemaspela melouri Martens, Maghradze and Barjadze, 2021: 543–548 (figs 1–18, original description, drawings of genitalia, pedipalp, chelicera; habitus drawing and photographs)

Nemaspela melouri – Martens, Maghradze and Barjadze, 2023: 368 (mention, new locality)

Type locality. Georgia, Imereti, Tskaltubo Municipality, Sataphlia-Tskaltubo karst massif, Melouri Cave.

Occurrence data in Georgia. Imereti • Melouri Cave, Tskaltubo Municipality; leg. E. Maghradze, 21 February 2019 / 1 January 2020 / 3 March 2020 (Martens et al. 2021). • Solkota Cave, Tskaltubo Municipality; leg. E. Maghradze and Sh. Barjadze, 28 August 2021 (Martens et al. 2023).

Global distribution. Endemic to caves of Georgia (Martens et al. 2021, 2023).

17. *Nemaspela prometheus* Martens, Maghradze and Barjadze, 2021

Nemaspela prometheus Martens, Maghradze and Barjadze, 2021: 548–553 (figs 19–32, original description, drawings of genitalia, pedipalp, chelicera; habitus drawing and photographs)

Type locality. Georgia, Imereti region, Tskaltubo Municipality, Sataphlia-Tskaltubo karst massif, Prometheus Cave.

Occurrence data in Georgia. Imereti • Prometheus Cave, Tskaltubo Municipality; leg. E. Maghradze, 27 December 2019 / 2 February 2020 / 1 March 2020; dark zone (Martens et al. 2021).

Global distribution. Endemic to a cave of Georgia (Martens et al. 2021).

18. *Nemaspela kotia* Martens, Maghradze and Barjadze, 2023

Nemaspela kotia Martens, Maghradze and Barjadze, 2023: (original description; drawings of genitalia, pedipalp, chelicera; habitus drawing and photographs)

Type locality. Georgia, Imereti Region, Chiatura Municipality, Zemo Imereti plateau karst massif, Kotia Cave.

Occurrence data in Georgia. Imereti • Kotia Cave (=Kotiasklde Cave), close to the village Sveri, Chiatura Municipality; leg. E. Maghradze, Sh. Barjadze and L. Shavadze, 8 October 2021 (Martens et al. 2023).

Global distribution. Endemic to a cave of Georgia (Martens et al. 2023).

Genus *Paranemastoma* Redikorzev, 1936

19. *Paranemastoma kalischevskyi* (Roewer, 1951)

Nemastoma kalischevskyi Roewer, 1951: 122 (plate 2, fig. 14, original description)

Nemastoma suchumium Roewer, 1951: 122 (plate 4, fig. 31, original description)

Nemastoma charitonovi Mkheidze, 1952a: 545–546 (fig. 1, original description)

Nemastoma charitonovi – Mkheidze, 1959: 111 (mention)

Nemastoma charitonovi – Mkheidze, 1964: 119 (fig. 2, mention)

Nemastoma kalischevskyi – Ljovushkin, 1966: 117 (mention; locality data)

Nemastoma kalischevskyi – Ljovushkin, 1972: 63 (mention)

Nemastoma kalischevskyi – Staręga, 1966: 390–391 (figs 3–4, redescription, new records)

Paranemastoma kalischevskyi – Staręga, 1978: 204 (mention)

Paranemastoma kalischevskyi – Martens, 2006: 196–199 (figs 28, 30a-d; 32, redescription, variation, new records, elevational records, relationships)

Paranemastoma kalischevskyi – Schönhofer, 2013: 41 (mention)

Paranemastoma kalischevskyi – Snegovaya, 2013: 185 (mention)

Paranemastoma kalischevskyi – Snegvaya, Pkhakadze and Inkirveli, 2014: 198 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Georgia, Abkhazia, Sokhumi Municipality, village Lata.

Occurrence data in Georgia. Abkhazia • Lata, Sokhumi Municipality; leg. Kalichevsky, September 1905 (Roewer 1951). • Tsebelda, Sokhumi Municipality; leg. Y.V. Vornov, 9 September 1908 (Snegovaya et al. 2014). • Akhali Atoni, Sokhumi Municipality; leg. A. Riedel, 16 November 1958 (Staręga 1966). • Mtsvane Kontskhi, Batumi Botanical garden, Kobuleti Municipality; leg. B. Pisarski, 10 August 1963 (Staręga 1966). • Chamkhona cave, Arabika karst massif, Gagra Municipality; leg. S.I. Ljovushkin, 1963 (Ljovushkin 1966; Ljovushkin 1972). • Akhali Atoni, Gudauta Municipality; leg. S.I. Golovatch, 8 October 1979 (Martens 2006). • Pskhu-Gumista Nature Reserve, Sokhumi Municipality; leg. J. Bohac, 6 June 1982 (Martens 2006). • 1–3 km N of Duripsh, Gudauta Municipality; 300–400 m a.s.l.; leg. A. Ushakov, 9 September 1985 (Martens 2006). • Ritsa Lake, Gudauta Municipality; leg. I.A. Ushakov, 11 September 1985 (Martens 2006). • Ritsa Lake, Gudauta Municipality; 950–1000 m a.s.l.; leg. S.I. Golovatch, 13/14 August 1986; Fagus, Abies, Picea, Acer etc. forest, litter, under bark and stones (Martens 2006). • Ritsa Lake, Gudauta Municipality; 1300–1450 m a.s.l.; leg. Golovatch, 14/16 August 1986; *Fagus*, *Acer* etc. forest on slope, under bark and stones (Martens 2006). • Pskhu, Sokhumi Municipality; 700–950 m a.s.l.; leg. S.I. Golovatch, 15/16 August 1986; *Fagus*, *Quercus*, *Castanea* etc. forest, litter, under bark and stones (Martens 2006). • Tsebelda, Gudauta Municipality; 300 m a.s.l.; leg. S.I. Golovatch, 19 August 1986; *Carpinus*, *Acer* and *Buxus* scrub, litter (Martens 2006). • Sokhumi Botan-

ical Garden; leg. S.I. Golovatch, 20 August 1986. • MFT Cave, Gudauta Municipality; leg. N. Myuge, 30 August 1986 (Martens 2006). • Kvemo Tsumuri, Pskhu-Gumista State Reserve; leg. A. Ushakov, 25 September 1989 (Martens 2006). **Adjara** • Zeraboseli, Kintrishi State Reserve, Kobuleti Municipality; 450–600 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1 March 1981 (Martens 2006). • Batumi Botanical Garden; 20–150 m a.s.l.; leg. S.I. Golovatch and J. Martens, 5 July 1981 (Martens 2006). • Zeraboseli, Kintrishi State Reserve; 800 m a.s.l.; leg. S.I. Golovatch, 13 October 1981 (Martens 2006). • Uchkho, Khulo Municipality; leg. T. Mkheidze, 5 March 1939 / 5 August 1939 (Mkheidze 1952; Mkheidze 1959; Mkheidze 1964) • 10 km E of Chakva, Chakvistavi, Kobuleti Municipality; leg. S.I. Kurbatov, 6 May 1987 (Martens 2006). **Samegrelo-Zemo Svaneti** • Nenskra Canyon, Lukhi, Mestia Municipality; 800 m a.s.l.; leg. A. Ryvkin, 2 September 1986 (Martens 2006). • Kherkhvashi, Mestia Municipality; 1250–1700 m a.s.l.; leg. S.I. Golovatch, 21 September 1986; *Quercus*, *Fagus*, *Carpinus*, *Picea*, *Abies* etc. forest, litter (Martens 2006). • Mazeri, Mestia Municipality; 1660 m a.s.l.; leg. V. Brachat and H. Meybohm, 26 June 2017 (CJM). • Ushguli, Mestia Municipality; 2190 m a.s.l.; leg. V. Brachat and H. Meybohm, 30 June 2017 (CJM). • 25 km N Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on a steep slope, ground moss covered (CJM). • Mestia; 1910–1650 m a.s.l.; leg. J. and B. Martens, 22 July 2019; mixed forest (CJM). • Latpari Pass, Mestia Municipality; 2100 m a.s.l.; leg. V. Brachat and H. Meybohm, 15 June 2021 (CJM). **Guria** • Vakijvari, Ozurgeti Municipality; 430 m a.s.l.; leg. V. Brachat and H. Meybohm, 12 June 2021 (CJM). **Imereti** • Kutaisi; leg. A. B. Shelkovnikov, 30 June 1911 (Snegovaya et al. 2014). • Bakhmaro, Chokhatauri Municipality; 1950–2020 m a.s.l.; leg. S.I. Golovatch and J. Martens, 8 June 1981 (Martens 2006). • Baghdati; 290–630 m a.s.l.; leg. V. Brachat and H. Meybohm, 18 May 2018 (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • Ghebi, Oni Municipality; 1310 m a.s.l.; leg. V. Brachat and H. Meybohm, 29 May 2018. • Shkedi, Lentekhi Municipality; 720 m a.s.l.; leg. J. and B. Martens, 20 July 2019 (CJM). **Samtskhe-Javakheti** • Kortaneti, Borjomi Municipality; leg. A. Riedel, 21 October 1958 (Staręga 1966). • 8 km of Akhaldaba, Borjomi Municipality; 1000m a.s.l.; leg. S.I. Golovatch, 12 May 1983; Nedzura valley, *Picea*, *Carpinus* and *Fagus* forest, litter, logs (Martens 2006). • Baniskhevi Valley, Borjomi Municipality; 800–900 m a.s.l.; leg. S.I. Golovatch, 16 May 1983; *Picea*, *Fagus* and *Carpinus* forest, litter, logs, under stones (Martens 2006). • Timotesubani monastery, Borjomi Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; mixed forest along a stream (CJM). • Borjomi; 960 m a.s.l.; leg. J. and B. Martens, 17 July 2019; mixed broad-leaved forest (CJM). **Shida Kartli** • Surami, Khashuri Municipality; 1000 m a.s.l.; leg. S.I. Golovatch, 17 May 1983; *Fagus*, *Alnus*, *Castanea*, *Rhododendron* forest (Martens 2006). • Holy Mountain above Kvishketi, Khashuri Municipality; 1200 m a.s.l.; 15 July 2019; leg. J. and B. Martens; *Fagus orientalis* forest (CJM). • Holy Mountain above Kvishketi, Khashuri Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 16 July 2019; mixed forest, mainly *Picea orientalis*, on stream banks (CJM). Mtskheta-Mtianeti • Pasanauri, Dusheti Municipality; leg. K.A. Satunin, July 1913 (Snegovaya et al. 2014). • Natakhtash (?) Pass; leg. A.B. Shelkovnikov, 14 July 1917 (Snegovaya et al. 2014). • Kazbegi; 1900 m a.s.l.; leg. M.S. Khokia, 17 July 1980; pitfall traps (Martens 2006). • Magalakhari Pass; 1200 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 6 May 1987 (Martens 2006). **Kakheti** • Batsaro State Reserve, Akhmeta Municipality; 800–850 m a.s.l.; leg. S.I. Golovatch and K. Eskov, 5/6 May 1987; *Fagus* and *Castanea* forest, litter (Martens 2006). • Gombori Pass, Sagarejo Municipality; 1500–1600 m a.s.l.; leg. J. and B. Martens, 28 July 2019; bushes along a stream (CJM). • Birkiani, Akhmeta Municipality; 930–1110 m a.s.l.; leg. J. and B. Martens, 31 July 2019; side valley, river banks, mixed broad-leaved forest (CJM).

Global distribution. Endemic to the Caucasian ecoregion. Records in Azerbaijan, Turkey, Georgia and Russian north-western Caucasus (Staręga 1978; Martens 2006; Schönhofer 2013; Snegovaya 2013; Kurt 2014).

Remarks. This is a widely distributed species occurring in a large variety of forest habitats and even in open patches far from forests; its elevational distribution presently known extends from 290 m a.s.l. to 2190 m a.s.l. (CJM, Martens 2006). In terms of morphology, this is a rather plastic species regarding the apophysis of the first member of the male chelicera and the armament of the dorsal scutum of the body (images in Martens 2006). Genetic analysis is needed to detect possible cryptic species.

20. *Paranemastoma bacurianum* (Mkheidze, 1959), comb. nov. et stat. nov.

Nemastoma (*Paranemastoma*) *superbum* subsp. *bacuriana* Mkheidze, 1959: 111 (fig. 1, original description)

Nemastoma superbum subsp. *Bacuriana* – Mkheidze, 1964: 119 (mention)

Paranemastoma superbum – Martens, 2006: 200 (redescription, mention)

Type locality. Georgia, Samtskhe-Javakheti region, Borjomi municipality, Bakuriani.

Occurrence data in Georgia. Guria • Lanchkhuti; leg. T. Mkheidze, 21 July 1946 (Mkheidze 1959). **Samtskhe-Javakheti** • Bakuriani, Borjomi Municipality; leg. T. Mkheidze, 28 June 1940 (Mkheidze 1959). • Timotesubani monastery, Borjomi Municipality; 1200 m a.s.l.; leg. J. and B. Martens, 15 July 2019; mixed forest along a stream (CJM). **Shida Kartli** • Kvishketi, Khashuri Municipality; 830 m a.s.l.; leg. J. and B. Martens, 16 July 2019; mixed forest, mainly *Picea orientalis*, on stream banks (CJM).

Global distribution. Endemic to Georgia.

Remarks. Martens (2006) put the local form *bacuriana*, described as a subspecies of the widely distributed *P. superbum* by Mkheidze (1959) with synonymy of the latter. New collections around the type locality, Bakuriani, revealed marked differences from *P. superbum* in body size, the form of male chelicerae, length of legs and pedipalp, and in addition, the dorsal silvery makings of the body (Martens unpublished data). Thus, the taxon *ba-*

curiana is resurrected here along with its newly affiliated species rank (stat. nov.).

Altitudinal records are sparse, up to now found at 750 – 1200 m a.s.l. (CJM).

21. *Paranemastoma superbum* Redikorzev, 1936

Paranemastoma superbum Redikorzev, 1936: 40 (figs 11–14, original description, distribution)
Nemastoma supersum – Roewer, 1951: 126 (table 6, fig. 56, description; new name for allegedly homonym *Nemastoma superbum*)
Nemastoma superbum – Mkheidze, 1959: 111 (mention)
Nemastoma (*Paranemastoma*) *superbum* – Mkheidze, 1964: 119 (mention)
Nemastoma (*Paranemastoma*) *supersum* – Staręga, 1966: 392 (figs 6–7, description, taxonomic discussion)
Paranemastoma supersum – Staręga, 1978: 206 (mention)
Paranemastoma superbum – Martens, 2006: 200 (figs 29–30e-f, 32; description, variation, new records, elevational records, relationships)
Paranemastoma superbum – Schönhofer, 2013: 43 (mention)
Paranemastoma superbum – Snegovaya, 2013: 185 (mention)
Paranemastoma superbum – Snegovaya, Pkhakadze, Intskirveli, 2014: 198–199 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Georgia, Adjara region, Batumi without exact locality.

Occurrence data in Georgia. Adjara • Batumi Botanical Garden; leg. T. Mkheidze, 27 June 1964 (Snegovaya et al. 2014). • Tsikhisdziri, Kobuleti Municipality; 100 m a.s.l.; leg. S.I. Golovatch and J. Martens, 30 May 1981 (Martens 2006). • Batumi Botanical Garden, Kobuleti Municipality; 20–150 m a.s.l.; leg. S.I. Golovatch and J. Martens, 30 May / 7 June 1981 (Martens 2006). • 1 km W of Tskhmorisi, Keda Municipality; leg. S.I. Golovatch, 1 October 1981; deciduous forest, litter and under stones near a spring (Martens 2006). • Batumi Botanical Garden, Kobuleti Municipality; 20–150 m a.s.l.; leg. S.I. Golovatch and J. Martens, 30 May / 12 June 1981 (Martens 2006) • Zeraboseli, Kintrishi State Reserve, Kobuleti Municipality; 450–600 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1/3 June 1981 (Martens 2006). • Tskhmorisi, Keda Municipality; leg. S.I. Golovatch, 11 October 1981; deciduous forest, litter (Martens 2006). • 3 Km SE of Chakhati, Kobuleti Municipality; leg. S.I. Golovatch, 14 October 1981; deciduous forest, litter and under stones near spring (Martens 2006). **Samegrelo-Zemo Svaneti** • Kortskheli Cave, Zugdidi Municipality; leg. Sh. Bajardze, 13 February 2014 (CJM). **Guria** • Lanchkhuti; leg. T. Mkheidze, 21 July 1939 (Mkheidze 1959). **Imereti** • Bregvadzeebisklde Cave, Chiatura Municipality; leg. Sh. Bajardze, 12 August 2014 (CJM). **Samskhe-Javakheti** • Bakuriani, Kobuleti Municipality; leg. T. Mkheidze, 28 June 1940 (Mkheidze 1959). **Kvemo Kartli** • Manglisi, Tetritskaro Municipality; leg. T. Mkheidze, 18 July 1969 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion. Records in Georgia, Turkey (Martens 2006; Schönhofer 2013; Snegovaya 2013).

Remarks. Elevational records are from near the sea level up to 150 m a.s.l.

Morphologically, this is a rather plastic species regarding the length of appendages (legs, pedipalps). The correct affiliation of certain largely scattered populations may turn out to be difficult. A genetic analysis is needed for the correct species affiliation and/or to detect possible cryptic species.

22. *Paranemastoma umbo* (Roewer, 1951)

Nemastoma umbo Roewer, 1951: 122 (table 1, fig. 4, table 3, fig. 23; original description)
Paranemastoma umbo – Staręga, 1978: 206 (mention)
Paranemastoma umbo – Martens, 2006: 206–207 (discussion of taxonomic status and distribution)
Paranemastoma umbo – Schönhofer, 2013: 46 (mention)
Paranemastoma umbo – Snegovaya, 2013: 185 (mention)

Type locality. Georgia, Abkhazia region, Sokhumi Municipality, village Lata.

Occurrence data in Georgia. Abkhazia • Lata near Tkvarcheli, Gulripshi Municipality; leg. V. Kalischevsky, September 1905 (Roewer 1951).

Global distribution. Allegedly restricted to Georgia, but due to incorrect labeling, probably not occurring in the Caucasian ecoregion (Martens 2006; Schönhofer 2013, Snegovaya, 2013).

Remarks. Martens (2006) explained that *P. umbo* displays a number of characters that are unusual in all Caucasian *Paranemastoma* species and he concluded that the relevant series in the Roewer collection in Senckenberg Museum/Frankfurt am Main, Germany, must have been labeled with the wrong location and, for the time being, should be removed from both the Georgian and the Caucasian lists.

Genus *Vestiferum* Martens, 2006

23. *Vestiferum alatum* Martens, 2006

Vestiferum alatum Martens, 2006: 176–178 (figs 18, 20, 21, original description, drawings of genitalia, pedipalp, chelicera; habitus drawing, relationships)
Vestiferum alatum – Schönhofer, 2013: 46 (mention)
Vestiferum alatum – Snegovaya, 2013: 184 (mention)

Type locality. Georgia, Adjara region, Kobuleti Municipality, village Zeraboseli.

Occurrence data in Georgia. Adjara • Zeraboseli in Kintrishi Strict Nature Reserve, Kobuleti Municipality; 450–600 m a.s.l.; leg. S.I. Golovatch and J. Martens, 1/3 June 1981 (Martens 2006). **Guria** • Vakijvari, Ozurgeti Municipality; 430 m a.s.l.; leg. V. Brachat and H. Meybohm, 12 June 2021 (CJM).

Global distribution. Endemic to the Caucasian ecoregion. Georgia, Turkey (Martens, 2006; Schönhofer 2013; Snegovaya 2013).

24. *Vestiferum funebre* (Redikorzev, 1936)

Nemastoma funebre Redikorzev, 1936: 36–37 (figs 5–6, 14, original description)
Nemastoma brunneum Redikorzev, 1936: 35–36 (figs 3–4, 14, original description)
Nemastoma brunneum – Mkheidze, 1964: 118 (mention)
Nemastoma funebre – Mkheidze, 1964: 118 (mention)
Nemastoma funebre – Staręga, 1966: 391 (mention)
Nemastoma funebre – Staręga, 1978: 203 (mention)
Vestiferum funebre – Martens, 2006: 178–180 (figs. 18, 20; redescription, distribution)
Vestiferum funebre – Snegovaya and Chumachenko, 2011: 121 (mention)
Vestiferum funebre – Schönhofer, 2013: 46 (mention)
Vestiferum funebre – Snegovaya, 2013: 182 (mention)
Vestiferum funebre – Snegovaya, Pkhakadze and Intskirveli, 2014: 199 (mention)

Type locality. Georgia, Abkhazia region, Sokhumi Municipality, lake near the settlement of the village Azhary.

Occurrence data in Georgia. Abkhazia • Lake near the settlement of the village Azhary, Sokhumi Municipality; leg. M. Kalichevsky, 1 August 1905 (Redikorzev 1936). • Tsebelda, Sokhumi Municipality; leg. Y.V. Voronov, September 1908. • Gagra Municipality; leg. I. Sokolov, June 1916 (Redikorzev 1936). • Amtkeli Lake, Sokhumi Municipality; 550 m a.s.l.; leg. S.I. Golovatch, 19 August 1986; *Alnus* forest, litter (Martens 2006).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Turkey, Caucasian part of Russia (Martens 2006; Schönhofer 2013; Snegovaya 2013).

Remarks. The only elevational record in Georgia is at 550 m a.s.l., and there is one additional record in the Russian Caucasus at 600–750 m (Martens 2006).

Family Sclerosomatidae Simon, 1879
Genus *Nelima* Roewer, 1910

25. *Nelima pontica* Charitonov, 1941

Nelima pontica Charitonov, 1941: 169 (figs 5–6, original description, distribution)
Nelima pontica – Birstein, 1950: 356 (mention)
Nelima longipedata Mkheidze, 1952b: 615 (fig. 3, original description)
Nelima longipedata – Mkheidze, 1959: 114 (mention)
Nelima longipedata – Mkheidze, 1962: 185 (mention)
Nelima longipedata – Mkheidze, 1964: 122 (mention)
Nelima pontica – Ljovuschkin and Starobogatov, 1963: 49–50 (fig. 6, discussion)
Nelima pontica – Staręga, 1966: 406 (fig. 22, mention; locality data)
Nelima pontica – Martens, 1969: 412 (figs 53–54, 57, relationships)
Nelima pontica – Staręga, 1978: 209 (mention)
Nelima pontica – Snegovaya and Chumachenko, 2011: 124 (mention)
Nelima pontica – Snegovaya, 2013: 185 (mention)
Nelima pontica – Snegovaya, Pkhakadze, Intskirveli, 2014: 199 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Georgia, Abkhazia, Gulripshi Municipality, Tsebelda karst massif, Kelasuri Cave.

Occurrence data in Georgia. Abkhazia • Pehu Valley, Sukhumi Municipality; leg. K.A. Satunin, August 1913 (Snegovaya et al. 2014). • Kelasuri Cave, Gudauta Municipality; leg. A. Osterloff, 6 August 1940 (Charitonov 1941). • Bagrati Mountain, Sokhumi Municipality; leg. B. Pisarski, 11 November 1963 (Staręga 1966). • Kelasuri, Sokhumi Municipality; leg. B. Pisarski, 13 November 1963 (Staręga 1966). • Gumista River (Second bridge), Sokhumi Municipality; leg. B. Pisarski, 21 November 1963 (Staręga 1966). **Adjara** • Batumi; leg. T. Mkheidze, 2 July 1965 (Snegovaya et al. 2014). • Batumi Botanical Garden; leg. T. Mkheidze, 19 July 1965 (Snegovaya et al. 2014). **Samegrelo-Zemo Svaneti** • 25 km N of Jvari, Tsalenjikha Municipality; 600 m a.s.l.; leg. J. and B. Martens, 20 July 2019; damp broadleaved forest on a steep slope, overgrown rock face, ground moss covered (CJM). **Guria** • Lanchkhuti; leg. T. Mkheidze, 10 July 1939 (Mkheidze 1952b). • Chokhatauri; leg. T. Mkheidze, 1 October 1970 (Snegovaya et al. 2014). • Shua Surebi, Chokhatauri Municipality; leg. not mentioned, August 1988 (Snegovaya et al. 2014). **Imereti** • Sairme, Baghdati Municipality; leg. T. Mkheidze, 9 July 1946 (Mkheidze 1952b). • Sairme, Baghdati Municipality; leg. T. Mkheidze, 1 October 1946 (Snegovaya et al. 2014). **Racha-Lechkhumi and Kvemo Svaneti** • Dolabistavi Cave, Racha karst massif, Ambrolauri Municipality; leg. A.G. Dzhanashvili, 15 December 1956 (Snegovaya et al. 2014). • Kvedi II Cave, 1.8 km SE of Kvedi, Oni Municipality; leg. J. Grego and R. Straub, 14 October 2021 (CJM).

Global distribution. Endemic to the Caucasian ecoregion. Georgia, the Caucasian part of Russia (Staręga 1978; Snegovaya 2013).

Remarks. Though *N. pontica* was often found in caves or at cave entrances, it is not a troglobiont species, and it lacks troglomorphic adaptations. Overgrown cliffs in ravines are accepted habitats as well (see above).

26. *Nelima doriae* (Canestrini, 1872)

Liobunum doriae Canestrini, 1872: 384, 385 (original description)
Nelima pisarskii – Staręga, 1966: 407–409 (figs 23–24; original description)
Nelima doriae – Martens 1969: 398–401 (figs 6, 8, 15–22, 23–27; distributional records, taxonomy, systematics)
Nelima doriae – Staręga, 1978: 208 (mention)
Nelima doriae – Snegovaya, 2013: 185 (mention)

Type locality. Italy, Genova without exact locality.

Occurrence data in Georgia. Abkhazia • Akhali Atoni (=Noviy Afon), Sokhumi Municipality; leg. B. Pisarski, 19 November 1963 (Staręga 1966).

Global distribution. Mostly Mediterranean. Georgia, Morocco, Spain, Italy, Algeria, Greece, former Yugoslavia

(Martens 1969; Staręga 1978); also in France, Belgium and the Netherlands (references in Martens 2021).

Remarks. The various populations of this species display rather different genitalic characters and may represent a set of different species, as is also indicated by its large distributional area. Besides, *N. doriae* was introduced to Australia, New Zealand (Gruber and Hunt 1973), and Argentina (Acosta and Cokendolpher 1990). A man-made introduction may apply to the single Georgian record as well.

Phalangiidae Latreille, 1802

Genus *Lacinius* Thorell, 1876

27. *Lacinius erinaceus* Staręga, 1966

Lacinius erinaceus Staręga, 1966: 399–400 (figs 15–17, original description)
Lacinius erinaceus – Staręga, 1978: 211 (mention)
Lacinius erinaceus – Kurt and Erman, 2012: 660–665 (figs 1–8, redescription)
Lacinius erinaceus – Snegovaya, 2013: 185 (mention)

Type locality. Georgia, Abkhazia region, Sokhumi Municipality, Gumista River surroundings.

Occurrence data in Georgia. Abkhazia • Gumista River surroundings, Sokhumi Municipality; leg. B. Pisarski, 21 November 1963 (Staręga 1966).

Global distribution. Endemic to the Caucasian ecoregion. Georgia, Turkey (Kurt and Erman 2012; Staręga 1978; Snegovaya 2013).

Genus *Mitopus* Thorell, 1876

28. *Mitopus morio* (Fabricius, 1779)

Phalangium morio Fabricius, 1779: 349 (original description)
Mitopus morio – Mkheidze, 1959: 112 (mention)
Mitopus morio – Mkheidze, 1964: 119 (mention)
Mitopus morio – Staręga, 1978: 212 (mention)
Mitopus morio – Snegovaya, 2013: 185 (mention)
Mitopus morio – Snegovaya, Pkhakadze, Intskirveli, 2014: 200 (locality data from historical collection of the Georgian National Museum)

Type locality. Norway without exact locality.

Occurrence data in Georgia. Samegrelo-Zemo Svaneti • Nakra River Valley, Mestia Municipality; Leg. A.N. Kaznakov, 5 August 1910 (Snegovaya et al. 2014). • Lentekhi, Mestia Municipality; leg. T. Mkheidze, 3 July 1959 (Snegovaya et al. 2014). **Guria** • Bakhmaro, Chokhatauri Municipality; leg. T. Mkheidze, 10 August 1939 (Mkheidze 1959). **Racha-Lechkhumi and Kvemo Svnaeti** • Ambrolauri; leg. T. Mkheidze, 17 July 1938 (Mkheidze 1959). **Kvemo Kartli** • Manglisi, Dusheti Municipality; leg. T. Mkheidze, 18 June 1964 (Snegovaya et al. 2014). **Mtskheta-Mtianeti** • Kazbegi (=Stepantsminda); leg. T. Mkheidze, 20 July 1938 (Mkheidze 1959). • Armazi, Mtskheta Municipality; leg. T. Mkheidze, 5 June 1971 (Snegovaya et al. 2014). **Tbilisi** • Kojori, Tbilisi Municipality; leg. T. Mkheidze, 6 June 1962 (Mkheidze 1964).

Global distribution. Widespread in the Palearctic but absent from the Mediterranean area proper, also recorded in Georgia and the Caucasian area in general (Mkheidze 1959, 1964; Staręga 1978; Snegovaya 2013).

Remarks. Mkheidze mentioned in her publications (1959, 1964) many *Mitopus morio* localities, such as even around Tbilisi, and, quite unexpectedly, afterwards nobody found the species again. The many Georgian localities and collecting data for *M. morio* published by Snegovaya et al. (2014) are based on the material of the Tbilisi Museum. Snegovaya et al. (2014) investigated at least four males in the National Museum of Georgia collected in Georgia, but despite the large opilionid collection available and several mentions in the literature of this species, no recent finds were recorded for this country. Staręga (1978) referred to the Mkheidze data; he did not check any of her material. All data needs verification through further research.

Genus *Odiellus* Roewer, 1923

29. *Odiellus lendlii* (Sørensen, 1894)

Acantholophus Lendlii Sørensen, 1894: 26–28 (figs 9, 13; original description)
Lacinius Bieniaszii Kulczynski, 1909: 463 (original description)
Odiellus bieniaszi – Staręga, 1966: 395–397 (figs. 9–11, description, Georgian localities)
Odiellus bieniaszi – Staręga, 1978: 213 (mention)
Odiellus lendli – Martens 1978: 344–345 (figs 651–656, redescription, mention for Georgia)
Odiellus bieniaszi – Snegovaya, 1999: 453–455 (figs 14–18)
Odiellus lendlii – Snegovaya, 2013: 185 (mention)
Odiellus lendlii – Snegovaya, Pkhakadze and Intskirveli, 2014: 200 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. No indication in the original description.

Occurrence data in Georgia. Shida Kartli • Gori; leg. A. Riedel, 18 October 1958 (Staręga 1966). **Samtskhe-Javakheti** • Borjomi; leg. A. Riedel, 20 October 1958 (Staręga 1966). • Tsaghveri, Borjomi Municipality; leg. A. Riedel, 20 October 1958; spruce forest (Staręga 1966).

Global distribution. A widespread Balkan species, in the Caucasian ecoregion noted from Georgia, Turkey, Azerbaijan, south-western Russia (Staręga 1966, 1978; Snegovaya 2013).

30. *Odiellus zecariensis* Mkheidze, 1952

Odiellus zecariensis Mkheidze, 1952a: 546 (fig. 2, original description)
Odiellus zecariensis – Mkheidze, 1959: 112 (mention)
Odiellus zecariensis – Mkheidze, 1964: 120(fig. 3; mention)
Odiellus zecariensis – Staręga, 1966: 397 (figs 12–14; redescription)
Odiellus zecariensis – Martens, 1978: 337 (figs 638–640; redescription, relationships)

Odiellus zecariensis – Staręga, 1978: 213 (mention)
Odiellus zecariensis – Snegovaya, 2013: 185 (mention)
Odiellus zecariensis – Snegovaya, Pkhakadze, Intskirveli, 2014: 199 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. As Mkheidze did not specify the type locality, in order to maintain taxonomic consistency and considering the species name, we restricted the type locality to Zekari, Baghdati Municipality, Imereti region.

Occurrence data in Georgia. djara • Mtsvane Kontskhi, Batumi Botanical garden, Kobuleti Municipality; leg. A. Riedel and B. Pisarski, 2/3/8/9/10 November 1958 (Staręga 1966).**Samegrelo Zemo-Svaneti** • Tskadisi, Ambrolauri Municipality; leg. T. Mkheidze, 17 July 1938 (Mkheidze 1952). • 25 km N of Jvari, Tsalenjikha Municipality; leg. J. and B. Martens, 20 July 2019; damp broad-leaved forest on steep slope, ground moss covered (CJM). • Lakhamula, Mestia Municipality; leg. J. and B. Martens, 21 July 2019; open broad-leaved forest (CJM). **Imereti** • Zekari, Baghdati Municipality; leg. T. Mkheidze, 20 August 1946 (Mkheidze 1952). • villages Tsipa and Pona, Kharagauli Municipality; leg. J. and B. Martens, 16 July 2019; low *Fagus orientalis* forest, banks of a stream (CJM). **Samtskhe-Javakheti** • Abastumani, Adigeni Municipality; leg. T. Mkheidze, 22 July 1938 (Mkheidze 1952). • Tsaghveri, Borjomi Municipality; leg. T. Mkheidze, 15 July 1946 (Mkheidze 1952). • Bakuriani, Borjomi Municipality; leg. J. and B. Martens, 15 July 2019; *Fagus orientalis* belt (CJM). • Borjomi; leg. J. and B. Martens, 17 July 2019; Park and forest along the Mtkvari River and small stream (CJM). *Shida Kartli* • Holy Mountain above Kvishketi village, Khashuri Municipality; leg. J. and B. Martens, 15 July 2019; 1200 m a.s.l, *Fagus orientalis* forest (CJM). *Kvemo Kartli* • Manglisi, Tetritskaro Municipality; leg. T. Mkheidze, 2 August 1944 (Mkheidze 1952). *Kakheti* • Gombori Pass, N and S face, Sagarejo Municipality; leg. J. and B. Martens, 28 July 2019; bushes along a stream (CJM). • Birkiani, side valley, Akhmeta Municipality; leg. J. and B. Martens, 31 July 2019 mixed broad leaf forest, river banks (CJM).

Global distribution. Probably near-endemic to the Caucasus region; records from Georgia, the Caucasian part of Russia, Turkey, Azerbaijan (Staręga 1978; Snegovaya 2013; Kurt 2014; Chemeris and Kovblyuk 2005).

Remarks. In Georgia a common and widespread species, up to now elevational records range from 600 m to 1600 m a.s.l. (CJM).

Genus *Opilio* Herbst, 1798

31. *Opilio arborphilus* Snegovaya, 2010

Opilio arborphilus Snegovaya, 2010: 7, 9 (figs 74–82, original description)
Opilio arborphilus – Snegovaya, 2013: 185 (mention)
Opilio arborphilus – Snegovaya, Pkhakadze and Intskirveli, 2014: 204 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Azerbaijan, Ismailly Municipality, Chaygovshan.

Occurrence data in Georgia. Abkhazia • Ritsa Lake, Sokhumi Municipality; leg. K.A. Satunin, 8 September 1919 (Snegovaya et al. 2014). **Adjara** • Kobuleti; leg. Y.N. Voronov, July/August 1917 (Snegovaya et al. 2014). **Samegrelo-Zemo Svaneti** • Mestia; 23 August 1965 (Snegovaya et al. 2014). **Guria** • Bakhmaro; leg. T. Mkheidze, 9 August 1939 (Snegovaya et al. 2014). **Racha-Lechkhumi and Kvemo Svaneti** • Choluri Valley, Lentekhi Municipality; leg. A.N. Kaznakov, 5 August 1910 (Snegovaya et al. 2014). **Samtskhe-Javakheti** • Nakalakevi, Aspindza Municipality; 18 September 1973 (Snegovaya et al. 2014). **Kvemo Kartli** • Tsalka; leg. D. Mikhailov and B. Kozminykh, 12/19 August 1989; oak, hornbeam, beech forest (Snegovaya 2010). **Mtskheta-Mtianeti** • Bazaleti Lake, Dusheti Municipality; leg. D.N. Bocharikov, 6 September 1917 (Snegovaya et al. 2014). • Gveleti, Dusheti Municipality; 22 August 1937 (Snegovaya et al. 2014). • Mtskheta; August 1964 (Snegovaya et al. 2014). • Environs of Tbilisi; leg. T. Mkheidze, 1972 (Snegovaya 2010). **Kakheti** • Lagodekhi Nature Reserve, Lagodekhi Municipality; 1958 (Snegovaya et al. 2014). • Lagodekhi; 7 July 1968 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Azerbaijan (Snegovaya, 2010, 2013).

32. *Opilio caucasicus* Snegovaya, 2010

Opilio caucasicus Snegovaya, 2010: 9 (figs. 92–100, original description)
Opilio caucasicus – Snegovaya, 2013: 185 (mention)
Opilio caucasicus – Snegovaya, Pkhakadze and Intskirveli, 2014: 206 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. Russia, Republic of Adigea, Lago-Naki plateau; NE of Lago-Naki plateau, "Kamennoye more" ridge.

Occurrence data in Georgia. Adjara • Goderdzi Pass, Khulo Municipality; leg. R. Schmidt, 23 October 1911 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, the northwest Caucasian part of Russia (Snegovaya, 2010, 2013).

33. *Opilio hemseni* Roewer, 1952

Opilio hemseni Roewer, 1952: 512–513 (fig. 1, original description)
Opilio reginae Staręga, 1966: 404 (figs 19–21, original description)
Opilio reginae – Staręga, 1978: 227 (mention)
Opilio hemseni – Snegovaya, 2013: 185 (mention)
Opilio hemseni – Snegovaya, Pkhakadze and Intskirveli, 2014: 206 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Iran, Isfahan province, Pir Bakran.

Occurrence data in Georgia. Abkhazia • Kelasuri Cave, Sokhumi Municipality; leg. B. Pisarski, 11 November 1963 (Staręga 1966). • near Gumista River; Sokhumi

Municipality; leg. B. Pisarski, 21 November 1963 (Staręga 1966). • Dow pass, Sokhumi Municipality; leg. K.A. Satunin, 18 August 1913 (Snegovaya et al. 2014). • Tsebelda, Gudauta Municipality; leg. Y.V. Voronov, August 1913 (Snegovaya et al. 2014). • Pehu, Sokhumi Municipality; leg. K. A. Satunin, August 1913 (Snegovaya et al. 2014). **Adjara** • Batumi Botanical Garden, Kobuleti Municipality; collector not mentioned, 19 July 1965 (Snegovaya et al. 2014). • Tsikhisdziri, Kobuleti Municipality; collector not mentioned, 20 June 1972 (Snegovaya et al. 2014). Samegrelo-Zemo Svaneti • Mestia; leg. T. Mkheidze, 6 August 1940 (Snegovaya et al. 2014). • Zekari pass; leg. T. Mkheidze, 21 August 1946 (Snegovaya et al. 2014). **Guria** • Lanchkhuti; leg. T. Mkheidze, 10 August 1939 (Snegovaya et al. 2014). • Chokhatauri; leg. T. Mkheidze, 12 August 1945 (Snegovaya et al. 2014). • Shua Surebi, Chokhatauri Municipality; collector not mentioned, August 1988 (Snegovaya et al. 2014). **Kvemo Kartli** • Rosha, Manglisi, Dmanisi Municipality; collector not mentioned, 18 July 1969 (Snegovaya et al. 2014). **Kakheti** • Telavi; leg. L. Mlokosevich, 8 August 1907 (Snegovaya et al. 2014). • Lagodekhi; leg. L. Mlokosevich, 18 August 1910 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Azerbaijan, Caucasian part of Russia (Staręga 1978; Snegovaya 2010, 2013).

34. *Opilio nabozhenkoi* Snegovaya, 2010

Opilio nabozhenkoi Snegovaya, 2010: 9 (figs 83–91; original description)
Opilio nabozhenkoi – Snegovaya, Pkhakadze and Intskirveli, 2014: 206 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Russia, North Ossetia, Alagir Municipality, 3 km E of Biragzang; Azerbaijan, Zakatala State Reserve, between 1 and 2 cordons. For the sake of taxonomic stability, we restrict the type locality to North Ossetia, Alagir Municipality.

Occurrence data in Georgia. Kakheti • Village Shroma valley, Lagodekhi Municipality; 24 June 1954 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Russia, Azerbaijan (Snegovaya 2010, 2013).

35. *Opilio parietinus* (De Geer, 1778)

Phalangium parietinum De Geer, 1778: 116 (original description)
Opilio parietinus – Mkheidze, 1959: 113 (mention)
Opilio parietinus – Mkheidze, 1962: 185 (mention)
Opilio parietinus – Mkheidze, 1964: 120 (mention)
Opilio parietinus – Staręga, 1966: 404 (mention)
Opilio parietinus – Staręga, 1978: 226 (mention)
Opilio parietinus – Snegovaya, 2013: 185 (mention)
Opilio parietinus – Snegovaya, Pkhakadze and Intskirveli, 2014: 204 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. Sweden without exact locality.

Occurrence data in Georgia. Adjara • Batumi Botanical garden, Kobuleti Municiaplity; 14 July 1961 (Snegovaya et al. 2014). • Tsikhisdziri, Kobuleti Municipality; 1967 (Snegovaya et al. 2014). **Samegrelo-Zemo Svaneti** • Mestia; leg. T. Mkheidze, 5 August 1940 (Mkheidze 1959). • Mestia; 17 August 1962 / 23 August 1965 / 27 September 1966 / October 1966 (Snegovaya et al. 2014). **Imereti** • Sairme, Baghdati Municipality; leg. T. Mkheidze, 6 August 1946 (Mkheidze 1959). • Surami, Kharagauli Municipality; 1800 m a.s.l; leg. T. Mkheidze, August 1958 (Mkheidze 1962). • Sakhvlari, Kharagauli Municipality; 1400 m a.s.l; leg. T. Mkheidze, August 1958 (Mkheidze 1962). **Racha-Lechkhumi and Kvemo Svaneti** • Oni; 15 August 1975 (Snegovaya et al. 2014). **Samtskhe-Javakheti** • Borjomi; leg. A. Riedel, 21 October 1958 (Staręga 1966). • Tsaghveri, Borjomi Municipality; August 1960 (Snegovaya et al. 2014). • Akhaldaba, Borjomi Municipality; 2 July 1973 (Snegovaya et al. 2014). • Aspindza; 13 September 1973 (Snegovaya et al. 2014). • Toloshi, Aspindza Municipality; 18 September 1973 (Snegovaya et al. 2014). • Nakalakevi, Aspindza Municipality; 18 September 1973 (Snegovaya et al. 2014). **Shida Kartli** • Gori; leg. A. Riedel, 18 October 1958 (Staręga 1966). • Znauri, Kareli Municipality; 15 August 1969 (Snegovaya et al. 2014). **Kvemo Kartli** • Manglisi, Tetritskaro Municipality; leg. T. Mkheidze, 25 August 1944 (Mkheidze 1959). **Tbilisi** • Kojori; leg. T. Mkheidze, 19 May 1938 (Mkheidze 1959). • Turtle Lake, Tbilisi Municipality; leg. A. Riedel, 12 October 1958 (Staręga 1966). • Lisi Lake, Tbilisi Municipality; leg. A. Riedel, 14 October 1958 (Staręga 1966). **Kakheti** • Chiauri forest, Lagodekhi Municipality (Snegovaya et al. 2014).

Global distribution. Widespread in the Caucasian ecoregion and in most parts of the Palearctic in general but sparsely distributed in the eastern part (Martens 1978; Staręga 1978; Snegovaya 2010, 2013).

36. *Opilio silvestris* Snegovaya, 2010

Opilio silvestris Snegovaya, 2010: 7 (figs 65–3, original description)
Opilio silvestris – Snegovaya, 2013: 185 (mention)
Opilio silvestris – Snegovaya, Pkhakadze and Intskirveli, 2014: 206 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. Azerbaijan, Shemakha district, Pirgulu, environs of Sis village.

Occurrence data in Georgia. Tbilisi • Kojori, Tbilisi Municiaplity; leg. T. Mkheidze, 6 June 1962 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Azerbaijan, Georgia (Snegovaya 2010a, 2013).

37. *Opilio lederi* Roewer, 1911

Opilio lederi Roewer, 1911: 45–46 (original description)
Opilio redikorzevi – Staręga, 1978: 227 (mention)

Opilio redikorzevi – Snegovaya, 1999: 455 (mention)
Opilio lederi – Staręga, 2003: 97 (locality record, mention)

Type locality. Azerbaijan, Gusar (=Kusari) district without exact locality.

Occurrence data in Georgia. Kvemo Kartli • Manglisi, Tetritskaro Municipality, without indication of sampling date and collector in Staręga (1978), while Gorbachev as collector of *Opilio redikorzevi* was mentioned in Staręga (2003).

Global distribution. Endemic to the Caucasian ecoregion: this Caucasian species has hitherto been reported from Armenia, Georgia and Azerbaijan (Staręga 1978; Snegovaya 2010).

Genus *Phalangium* Linnaeus, 1758

38. *Phalangium mcheidzeae* Snegovaya, 2014

Phalangium mcheidzeae Snegovaya, 2014: 6 (figs 99–112, original description)
Phalangium mcheidzeae – Snegovaya, 2013: 185 (mention)

Type locality. Georgia, Tbilisi Municipality, Kiketi.

Occurrence data in Georgia. Tbilisi • Kiketi; leg. T. Mkheidze, 2 June 1963 (Snegovaya 2014).

Global distribution. Endemic to the Caucasian ecoregion (Snegovaya 2013, 2014).

39. *Phalangium opilio* Linnaeus, 1758

Phalangium opilio Linnaeus, 1758: 618 (original description)
Phalangium opilio – Mkheidze, 1959: 113 (mention)
Phalangium opilio – Mkheidze, 1964: 120 (mention)
Phalangium opilio – Staręga, 1966: 401 (mention)
Phalangium opilio – Staręga, 1978: 215 (mention)
Phalangium opilio – Snegovaya, 2013: 185 (mention)
Phalangium opilio – Snegovaya, 2014: 2 (figs 1–16, 128, description, distribution)
Phalangium opilio – Snegovaya, Pkhakadze and Intskirveli, 2014: 204–205 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. It was not indicated in the original description (only the general distributional was mentioned as "Europa, America"). The type locality was restricted by Martens (1978) to southern Sweden, the main working area of Carolus Linnaeus.

Occurrence data in Georgia. Abkhazia • Kodori Valley; leg. A.N. Kaznakov, 17 August 1907 (Snegoaya et al. 2014). • Tsebelda, Gudauta Municipality; leg. Y. Voronov, July 1914 (Snegovaya 2014). **Racha-Lechkhumi and Kvemo Svaneti** • Znakva, Ambrolauri Municipality; leg. T. Mkheidze, 10 August 1939 (Mkheidze 1959). • Oni; 20 August 1975 (Snegoaya et al. 2014). **Samtskhe-Javakheti** • Bakuriani, Borjomi Municipality; 1700 m a.s.l.; leg. R. Bankowska, 4 October 1963 (Staręga, 1966). **Kvemo Kartli** • Manglisi, Tetritskaro Municipality; no further info mentioned (Snegoaya et al. 2014). **Mtskheta-Mtianeti** • Gveleti, Tusheti; 22 August 1937 (Snegoaya et al. 2014). • Shatili, Khevsureti; 1500 m a.s.l.; leg. M. Intskirveli, 23 August 1987 (Snegoaya et al. 2014).

Global distribution. Widespread in the Holarctic; native to Europe and Palearctic West Asia, introduced to USA, Canada, New Zealand and Japan (Martens 1978).

40. *Phalangium punctipes* (L. Koch, 1878)

Opilio punctipes L. Koch, 1878: 63 (original description)
Zacheus caucasicus – Mkheidze, 1959: 113 (mention)
Zacheus caucasicus – Mkheidze, 1962: 185 (mention)
Metaplatybunus grandissimus – Mkheidze, 1959: 114 (mention)
Metaplatybunus grandissimus – Mkheidze, 1964: 121 (mention)
Phalangium punctipes – Staręga, 1966: 401 (mention)
Phalangium punctipes – Staręga, 1978: 216 (mention)
Phalangium punctipes – Snegovaya, 1999: 455–456 (figs 24–33, mention)
Phalangium punctipes – Snegovaya, 2004: 316 (mention)
Phalangium punctipes – Snegovaya, 2013: 185 (mention)
Phalangium punctipes – Snegovaya, Pkhakadze and Intskirveli, 2014: 204 (mention; locality data from historical collection of the Georgian National Museum)
Phalangium punctipes – Snegovaya, 2014: 3–4 (figs 17–33, 128, redescription, distributional data)

Type locality. Armenia, Sardarabad near Yerevan.

Occurrence data in Georgia. Guria • Bakhmaro, Chokhatauri Municipality; 2300 m a.s.l.; leg. T. Mkheidze, 9 August 1939 (Mkheidze 1959). **Imereti** • Kutaisi; leg. A.B Shelkovnikov, 30 June 1911 (Snegovaya et al. 2014). **Racha-Lechkhumi and Kvemo Svaneti** • Mamisoni Pass, Shovi Municipality; 3000 m a.s.l.; leg. T. Mkheidze, 17 July 1938 (Mkheidze 1959). **Samtskhe-Javakheti** • Tskhratskaro, Bakuriani, Borjomi Municipality; leg. T. Mkheidze, 2 August 1945 (Mkheidze 1959). • Tatanisi, Akhaltsikhe Municipality; leg. T. Mkheidze, 18 July 1939 (Snegovaya et al. 2014). **Shida Kartli** • Gori; leg. K. Satunin, 16 June 1909 (Snegovaya et al. 2014). • Gori; leg. A. Riedel, 18 October 1958 (Staręga 1966). **Mtskheta-Mtianeti** • Khevsureti; leg. M. Intskirveli (Snegovaya 2014). • Devdoraki surroundings, Kazbegi Municipality; leg. T. Mkheidze, 20 July 1938 (Mkheidze 1959). • Mutso, Shatili; leg. M. Intskirveli, 26 August 1988 (Snegovaya 2014). **Tbilisi** • Turtle Lake; leg. M. Zaitsev, 3 April 1913 (Snegovaya 2014). • Ortachala; leg. T. Mkheidze, 5 May 1946 (Mkheidze 1959). • Dighomi; leg. T. Mkheidze, 22 May 1946 (Mkheidze 1959). • Shavnabada; leg. T. Mkheidze, 15 June 1946 (Mkheidze 1959). • Kojori; leg. T. Mkheidze, 12 May 1938 (Mkheidze 1959). • Udzo; leg. T. Mkheidze, 12 May 1938 (Mkheidze 1959). • Okrokana; leg. T. Mkheidze, 12 May 1938 (Mkheidze 1959). **Kakheti** • environs of Telavi; leg. Fursov, April 1907 (Snegovaya 2014). • Eldari Valley, Dedoplitskaro Municipality; leg. T. Mkheidze, 25 March 1940 (Snegovaya et al. 2014). • Mukhrovani, Gardabani Municipality; 26 March 1950 (Snegovaya et al. 2014).

Global distribution. Widespread throughout the Caucasus and neighbouring areas (Staręga 1978; Snegovaya 2013).

Genus *Rilaena* Šilhavý, 1965

41. *Rilaena artvinensis* Kurt, 2015

Rilaena artvinensis Kurt, 2015a: pages 1–5 (figs 1–4, original description)
Rilaena artvinensis – Snegovaya, 2022: 3–5 (fig. 2, description)

Type locality. Turkey, Artvin Province, Borçka district, Cankurtaran passage.

Occurrence data in Georgia. Adjara • Kintrishi National Park, Kobuleti Municipality; 1264 m a.s.l.; leg. CaBOL members et al., 1–15 June 2018; above the waterfall (Snegovaya 2022).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Turkey (Kurt 2015a; Snegovaya 2022).

42. *Rilaena atrolutea* (Roewer, 1915)

Metaplatybunus atroluteus Roewer, 1915: 133–134 (original description)
Metaplatybunus atroluteus – Roewer, 1923: 853 (fig. 1024, redescription)
Rilaena atrolutea – Snegovaya, 2013: 185 (mention)
Rilaena atrolutea – Snegovaya, Pkhakadze and Intskirveli, 2014: 200–201 (mention, locality data from historical collection of the Georgian National Museum)

Type locality. Russia, North Ossetia-Alania, Vladikavkaz.

Occurrence data in Georgia. Racha-Lechkhumi and Kvemo Svaneti • Shovi, Oni Municipality; 17 August 1936 (Snegovaya et al. 2014). • Oni; 20 August 1975 (Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Russian Caucasus, Georgia (Snegovaya 2013).

43. *Rilaena caucasica* Snegovaya and Chemeris, 2016

Rilaena caucasica Snegovaya and Chemeris, 2016: 265–267 (fig. 1, original description)

Type locality. As the type locality we choose the origin of the holotype which is Georgia, Abkhazia, Sukhumi Municipality, Marukhi Mts.

Occurrence data in Georgia. Abkhazia • Marukhi, Sokhumi Municipality; 1800 m a.s.l.; leg. M. Kalichevsky, 11 July 1905 (Snegovaya and Chemeris 2016).

Global distribution. Endemic to the Caucasian ecoregion: Georgia and Russian Caucasus (Snegovaya and Chemeris 2016).

44. *Rilaena picta* (Mkheidze, 1952)

Metaplatybunus pictus Mkheidze, 1952b: 613 (fig. 1, original description)
Metaplatybunus pictus – Mkheidze, 1959: 114 (mention)
Metaplatybunus pictus – Mkheidze, 1964: 122 (fig. 5, mention)
Rilaena picta – Snegovaya, 2013: 185 (mention)
Rilaena picta – Snegovaya, Pkhakadze and Intskirveli, 2014: 200 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Georgia, Guria, Chokhatauri Municipality, Bakhmaro.

Occurrence data in Georgia. Guria • Bakhmaro, Chokhatauri Municipality; leg. T. Mkheidze, 10 August 1939 (Mkheidze 1952b; Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia (Snegovaya 2013).

45. *Rilaena silhavyi* Snegovaya and Chemeris, 2016

Rilaena silhavyi Snegovaya and Chemeris 2016: 267–270 (fig. 2, original description)

Type locality. Georgia, Abkhazia, Sokhumi without exact locality.

Occurrence data in Georgia. Abkhazia • Sokhumi; leg. Bryanskiy, 2 November 1909 (Snegovaya and Chemeris 2016).

Global distribution. Endemic to the Caucasian ecoregion: Georgia (Snegovaya and Chemeris 2016).

46. *Rilaena zakatalica* Snegovaya and Chemeris, 2004

Rilaena zakatalica Snegovaya and Chemeris, 2004: 273–274 (figs 39–58, original description)
Platybunus bucephalus – Mkheidze, 1959: 114 (mention)
Rilaena picta – Snegovaya, Chumachenko, 2011: 124 (mention)
Rilaena zakatalica – Snegovaya, 2013: 185 (mention)
Rilaena zakatalica – Snegovaya, Pkhakadze and Intskirveli, 2014: 201 (mention; locality data)

Type locality. Azerbaijan, 22 km NE from Zakatala, Rochugel Mountain.

Occurrence data in Georgia. Adjara • Zeraboseli, Kintrishi State Reserve; 450–600 m a.s.l.; leg. S.I. Golovatch, 13 October 1981; deciduous forest, litter, under stones (CJM). **Abkhazia** • N of Lake Ritsa, Gudauta Municipality; leg. J.A. Ushakov, 15 September 1985 (CJM). **Guria** • near Bakhmaro, 40 km SE of Nabeglavi, Chokhatauri Municipality; 1550–1700 m a.s.l.; leg. S.I. Golovatch and J. Martens, 8 June 1981; *Abies*, *Picea*, *Fagus* forest (CJM). **Samegrelo-Zemo Svaneti** • Mestia / Becho / Shikhra; leg. T. Mkheidze, 10 August 1940 (Mkheidze 1959). **Imereti** • Nearby Tkibuli; leg. S.I. Golovatch, 24 October 2018; deciduous forest, litter (CJM). • Rikoti Pass; 1000 m a.s.l.; leg. J. and B. Martens, 24 May 2023; mixed forest, *Rhododendron*, *Pinus* (CJM). **Racha-Lechkhumi and Kvemo Svaneti** • Usholta Cave entrance, Oni municipality; leg. E. Maghradze and Sh. Barjadze, 25 July 2022 (CJM).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Azerbaijan, Russian Caucasus, Turkey (Snegovaya 2013; Kurt 2015b).

Genus *Metaplatybunus* Roewer, 1911

47. *Metaplatybunus georgicus* Mkheidze 1952

Metaplatybunus georgicus Mkheidze 1952b: 614–615 (fig. 2, original description)
Metaplatybunus georgicus – Mkheidze, 1959: 114 (mention)
Metaplatybunus georgicus – Mkheidze, 1964: 122 (mention)
Metaplatybunus hypanicus, Šilhavý, 1966: 478–481 (fig. 1, original description, type locality Russia, Kuban) **syn. nov.**

Type locality. Georgia, Guria, Chokhatauri Municipality, Bakhmaro.

Occurrence data in Georgia. Guria • Bakhmaro, Chokhatauri Municipality; leg. T. Mkheidze, 11 August 1938 (Mkheidze 1952b). **Imereti** • Sairme, Baghdati Municipality; leg. T. Mkheidze, 6 August 1946 (Mkheidze 1952b). **Samtskhe-Javakheti** • Akhaltsikhe; leg. T. Mkheidze, 18 July 1939 (Mkheidze 1952b). • Abastumani, Adigeni Municipality; leg. T. Mkheidze, 23 July 1939 (Mkheidze 1952b). • Tsaghveri, Borjomi Municipality; leg. T. Mkheidze, 12 August 1946 (Mkheidze 1952b). **Mtskheta-Mtianeti** • Kazbegi (=Stepanstsminda); leg. T. Mkheidze, 20 July 1939 (Mkheidze 1952b).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Turkey, Russian Caucasus (Snegovaya 2013).

Remarks. While working with the collection of Opiliones in the National Museum of Georgia (Tbilisi), N. Snegovaya found *M. georgicus* and *M. hypanicus* to be identical. Following the rules of the nomenclatural code, priority is given to the species described earlier, i.e. *M. georgicus*. Accordingly, *M. hypanicus* becomes a junior synonym of *M. georgicus*.

Genus *Zacheus* C.L. Koch, 1839

48. *Zachaeus birulai* Redikorzev, 1936

Zachaeus birulai Redikorzev, 1936: 44–45 (figs 16–17, original description)
Paropilio monticola Mkheidze, 1952a: 547 (fig. 3, original description)
Paropilio montanus – Mkheidze, 1959: 113 (mention)
Zachaeus birulai – Mkheidze, 1959: 113 (mention)
Paropilio monticola – Mkheidze, 1964: 121 (fig. 4, mention)
Zachaeus birulai – Mkheidze, 1964: 121 (mention)
Paropilio monticola – Staręga, 1978: 215 (mention)
Zacheus birulai – Staręga, 1978: 218 (mention)
Zacheus birulai – Snegovaya, 1999: 455, 458 (mention)
Zacheus birulai – Snegovaya, 2004: 313 (mention)
Zachaeus birulai – Snegovaya, 2013: 185 (mention)
Zachaeus birulai – Snegovaya, Pkhakadze and Intskirveli, 2014: 201–203 (mention; locality data from historical collection of the Georgian National Museum)

Type locality. Georgia, Kakheti, Lagodekhi.

Occurrence data in Georgia. Adjara • Chakvi, Kobuleti Municipality; 22 June 1967 (Snegovaya et al. 2014). • Batumi Botanical Garden; July 1968 (Snegovaya et al. 2014). **Guria** • Bakhmaro, Chokhatauri Municipality; leg. T. Mkheidze, 2 August 1945 (Snegovaya et al. 2014). **Samskhe-Javakheti** • Tskhratskaro, Bakuriani; 2470 m a.s.l.; leg. T. Mkheidze, 2 August 1945 (Snegovaya et al. 2014). • Borjomi; August 1965 (Snegovaya et al. 2014). **Kvemo Kartli** • Manglisi; 15 July 1911 / 29 June 1963 / 18 July 1964 (Snegovaya et al. 2014). • Bethania; 18 July 1964 (Snegovaya et al. 2014). • Tetritskaro; 1 July 1969 (Snegovaya et al. 2014). **Mtskheta-Mtianeti** • Bakuriani; leg. K. Satunin, 15 June 1908 (Snegovaya et al. 2014). • Bakuriani; leg. T. Mkheidze, 4 August 1940 / 27 July 1945 / 2–8 August 1945 (Mkheidze 1952a; Mkheidze 1959). • Tusheti; July 1959 (Snegovaya et al. 2014). • Pasanauri; August 1965 (Snegovaya et al. 2014). • Tsodoreti; 26 July 1985 (Snegovaya et al. 2014). • Shatili, Khevsureti; 1500 m a.s.l.; leg. M. Intskirveli, 24 August 1987 (Snegovaya et al. 2014). **Tbilisi** • Near Korogli, Kojori; 21 June 1955 (Snegovaya et al. 2014). • Udzo, kojori; 27 June 1957 (Snegovaya et al. 2014). • Kojori; T. Mkheidze, 25 July 1957 (Snegovaya et al. 2014). • Tabakhmela; leg. D. Kharnitonov, 5 July 1960 (Snegovaya et al. 2014). • Kojori; 30 June 1962 (Snegovaya et al. 2014). • Kiketi; 22 July 1962 / 2 July 1963 / 16 July 1969 (Snegovaya et al. 2014). • Turtle Lake, Tbilisi Municipality; 30 June 1973 (Snegovaya et al. 2014). • Tskneti; 17 July 1973 (Snegovaya et al. 2014). **Kakheti** • Lagodekhi; leg. V. Redikortsev, 13 July 1893 (Snegovaya et al. 2014). • Ujarma, Sagarejo Municipality; June 1965 (Snegovaya et al. 2014). • Lagodekhi; 7 July 1958 / 1967 / 1973 (Mkheidze 1964; Snegovaya et al. 2014).

Global distribution. Endemic to the Caucasian ecoregion: Georgia, Azerbaijan, Armenia (Starega 1978; Snegovaya 2013).

Discussion

Despite Georgia being a small country comprising about 69.700 km², its harvestman fauna is comparatively rich and by far not fully explored. According to present knowledge, Georgia comprises about 48 species. This relatively high number of species is caused by the marked geomorphological and landscape diversity of the country (Theissen 2022). The Caucasus is an important link within the Eurasian Tertiary Mountain chain, ranging from the Alps in the west to the Caucasus, the Central Asian Mountains, to the Himalayas in the east. With regard to Opiliones, Georgia and the Caucasus in general may represent a steppingstone for the fauna from east to west and vice versa. Yet, such a steppingstone hypothesis is unlikely, at least for harvestmen. The mountain stocks to the east and west have rather different faunas, and there are few common species; accordingly, there is little overlap in the genera composition of species assemblies (J. Martens unpublished data).

The Georgian opilionid fauna and that of the Caucasus in general are characterized by many small-range endemics, but these belong – at least as presently believed – to otherwise widespread genera, whose species are largely concentrated in the West Palearctic. Presently, we could identify only three Western-Palearctic species, *Nemastoma dentigerum*, *Phlangium opilio*, and *Opilio parietinus*, having

locally reached the Caucasus (and only partly Georgia) from their extended northern and western ranges. These facts indicate that the Caucasian opilioned fauna evolved independently for a long period of time.

At close range, the opilionid faunal composition in Georgia is rather peculiar. Only two families play a major role: Phalangiidae and Nemastomatidae; 85.4% of the species set belongs to these families. The species of the former family are rather long-legged with a relatively good ability to disperse, while the species of the latter are small, short-legged, and prone to form locally isolated populations and thus tend to evolve into new species. Presently, the Georgian fauna comprises 22 species of Phalangiidae (40 species in the Caucasus ecoregion) and 19 species of Nemastomatidae (33 species in the Caucasus ecoregion). Interestingly, the Phalangiidae have their main distributional areas in the drier eastern part of the Caucasus, mainly in Azerbaijan, which is partly also seen from their distribution within Georgia, while the Nemastomatidae which depends on moist soil cover in forests, have the bulk of small-range endemic species in the north-western Caucasus, though many in Georgia, too.

Apart from Phalangiidae and Nemastomatidae, in Georgia species numbers strongly decrease. There are two genera of Trogulidae: *Calathocratus* and *Trogulus*, with one species each; Dicranolasmatidae, with two species of *Dicranolasma*; and one unconfirmed species of mite harvestman, the suborder Cyphophthalmi. Representatives of the large, mainly tropical suborder Laniatores have never been found in the Caucasus.

There are no endemic genera in Georgia due to the small size of the country, but concerning the Caucasian ecoregion, there are several. Most conspicuous are the genera *Caucnemastoma* Martens, 2006 and *Vestiferum* Martens, 2006 within the Nemastomatidae which comprise two species each. Most remarkable are two newly discovered species, which represent unusual new genera within Sclerosomatidae and which have been found just beyond Georgian borders. The first is *Amilenoides caucasicus* Martens and Wijnhoven, 2022, from Kabardino-Balkaria, north of the Georgian border. Most probably, the species is related to *Amilenus aurantiacus* (Simon, 1881) from mountainous central Europe. The other one is *Kovalius logunovi* Chemeris, 2023. The species was discovered in a cave near Sochi, but it is not a specialized cave dweller at all; it was also collected in the open air, again near Sochi (CJM). Concerning their unique male genital characteristics, both species may represent relictual offshoots from the early evolution of Sclerosomatidae and are striking witnesses of an ancient Caucasian fauna.

One should also take into account that several Caucasian species, which have their present positions in large West Palearctic genera like *Metaphalangium*, *Metaplatybunus*, *Opilio*, *Rilaena*, and *Zacheus*, may hint at a considerable faunal overlap with the areas east and west of the Caucasus. However, these faunal components never underwent a thorough taxonomic and evolutionary analysis, not to speak of molecular genetic investigations. Likely, among them, relictual species may eventually turn up, once more morphological and genetic details are known and additional isolated genera have to be erected.

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